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DIVISION 09 - FINISHES

SECTION 09900

PAINTS AND COATINGS

09/00

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DEPARTMENT OF THE NAVY
NAVAL FACILITIES
ENGINEERING COMMAND JTC/6-13-00
GUIDE SPECIFICATION

NFGS-09900M
30 September 2000
Superseding NFGS-09900L (09/99)

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NFGS-09900M

PAINTS AND COATINGS

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Preparing Activity: LANTNAVFACENGCOM

	Typed Name & Reg.	Signature	Date
Prepared by:	**J. T. Crawford**	**/s/**	**08/10/98**
Approved by:	**E. J. Gallaher, P.E.** **Branch Manager**	**/s/**	**08/10/98**
Approved by:	**W. H. Crone, P.E.** **Division Director**	**/s/**	**08/10/98**
Approved for NAVFAC:	**/s/** **Carl E. Kersten, R.A.**		**09/30/98**

Any changes or revisions to this document since the date of the original approval for NAVFAC, have been performed by the Guide Specifications Division (Code 15G).

Changes or Revisions Approved for NAVFAC:	**/s/** **Carl E. Kersten, R.A.**	**09/30/00**

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SECTION 09900

PAINTS AND COATINGS
09/00

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NOTE: This guide covers painting surfaces of new and existing construction:

1. Buildings;

2. Related mechanical, electrical, and miscellaneous items; and

3. Shore-to-ship utility connections.

This guide specification was not prepared to address the requirements of routine maintenance painting although it could be modified to do so.

This guide specification does not address painting of:

1. Towers;

2. Pilings;

3. Pavement markings;

4. Items requiring specialized treatment due to peculiar usage;

5. Petroleum storage facilities;

6. Water storage facilities; and

7. Waterfront facilities, except shore-to-ship utility connections.

If such items are in the project they should be included in a separate section or this section should be modified accordingly. This guide generally contains only two types of coating systems, one solvent based and one water based. If different systems are required regionally, or for special needs, modify the guide accordingly.
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NOTE: This revision "M" to NFGS-09900 amends the issue dated 30 September 1999 by updating references and incorporating new paint reference standards of Master Painters Institute (MPI).

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PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH)

ACGIH TLV-BKLT	(1991-1992) Threshold Limit Values (TLVs) for Chemical Substances and Physical Agents and Biological Exposure Indices (BEIs)
ACGIH TLV-DOC	Documentation of Threshold Limit Values and Biological Exposure Indices

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 669	(1995) Glazing Compounds for Back Bedding and Face Glazing of Metal Sash
ASTM C 920	(1998) Elastomeric Joint Sealants
ASTM D 2092	(1995) Preparation of Zinc-Coated (Galvanized) Steel Surfaces for Painting
ASTM D 2824	(1994) Aluminum-Pigmented Asphalt Roof Coatings, Non-Fibered, Asbestos Fibered, and Fibered Without Asbestos
ASTM D 4214	(1998) Evaluating the Degree of Chalking of Exterior Paint Films
ASTM D 4263	(1983; R 1999) Indicating Moisture in Concrete by the Plastic Sheet Method

CODE OF FEDERAL REGULATIONS (CFR)

29 CFR 1910.1000	Air Contaminants
29 CFR 1910.1001	Asbestos, Tremolite, Anthophyllite, and Actinolite
29 CFR 1910.1025	Lead

29 CFR 1926.62	Lead Exposure in Construction

COMMERCIAL ITEM DESCRIPTIONS (CID)

CID A-A-378	Putty, Linseed Oil Type (For Wood-Sash-Glazing)
CID A-A-1500	(Rev. A) Sealer, Surface (Latex Block Filler)
CID A-A-1558	(Rev. A) Paint, Stencil
CID A-A-1800	Varnish, Oil: Spar
CID A-A-2246	Paint, Latex (Gloss, Interior)
CID A-A-2335	Sealer, Surface (Varnish Type, Wood and Cork Floors)
CID A-A-2336	(Rev. A) Primer Coating (Alkyd, Exterior Wood, White and Tints)
CID A-A-2904	Thinner, Paint, Mineral Spirits, Regular and Odorless
CID A-A-2962	Enamel, Alkyd, Class A, Grade C
CID A-A-2994	Primer Coating, Interior, for Walls and Wood
CID A-A-3054	Paint, Heat Resisting (400 Degrees F)
CID A-A-3067	Paint, Alkyd, Exterior, Low VOC
CID A-A-3120	Paint: For Swimming Pools
CID A-A-50557	Primer, Water-Borne, Acrylic or Modified Acrylic, For Metal Surfaces
CID A-A-50570	Paint Water-Borne, Acrylic or Modified Acrylic, Semigloss, for Metal Surfaces
CID A-A-50574	Enamel, Odorless, Alkyd, Interior, Semigloss, White and Tints

FEDERAL STANDARDS (FED-STD)

FED-STD-313	(Rev. C) Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities

FEDERAL SPECIFICATIONS (FS)

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NOTE: Following is a list of coatings prohibited in California and other localities because of excess VOC content:

FS TT-P-28, FS TT-C-542, FS TT-C-555, FS TT-E-487, FS TT-S-708 FS TT-E-489, FS TT-S-711, FS TT-E-1593

The following meet California requirements but may not be suitable for other locations:

FS TT-S-001992 SSPC Paint 20

As guidance in selection of coating systems in Tables 1 through 7, general characteristics for specified and optional classifications of coating materials are given below.

VOC compliant materials may be selected, based on:

1. Regional air quality regulations for the site location,

2. The applicable rule, and

3. Any specialty or exemption category.

Environmentally acceptable coatings may be further ensured by avoiding hazardous materials and including, as a minimum, requirements in purchase order or bill of materials to prohibit coatings containing materials listed in paragraph entitled "Environmental Protection." ACGIH A1 confirmed human carcinogens include asbestos, benzene, chromates, and coal tar. ACGIH A2 suspected human carcinogens include cadmium and certain chromates. Specify new galvanized steel, in appropriate section, to be without hexavalent chromium stain inhibitors.

To assist in selection of systems providing intended protection and appearance, generic types, glosses, and colors are listed in the following table. Where only topcoating for cosmetic purposes is required, a compatible topcoat that hides substrate should be selected. There are proposed rules limiting VOC content in states other than California. These rules are for architectural and industrial maintenance paints and coatings. Check local and State regulations concerning allowable VOC limits. The most stringent govern.

CHARACTERISTICS OF REFERENCED COATING MATERIALS

Specification Designation	VOC (g/L) Specified Maximum	VOC (g/L) Typical[a]	Generic Type/ Classifications	Gloss	Colors
MFMA HDGF 91		350	water-base finish Group 5	gloss	clear
Shellac		620	orange shellac, 3-lb cut	gloss	clear
FS TT-P-19	250		acrylic emulsion paint, Type I Type II Type III Type IV	flat	high-hiding white all, ready mixed medium base deep base
FS TT-P-28 [b]		540	silicone or modified silicone aluminum paint (to 1200 degrees F)		aluminum
FS TT-P-29	250		latex paint Type I Type II	flat	tints, white high-hiding white
FS TT-P-38		430	oleoresinous phenolic aluminum paint		aluminum
CID A-A-50574			alkyd paint Type I Type II		semi tints, white high-hiding white
(follows same format as TT-E-509)	compl.	250	Class 1		

CHARACTERISTICS OF REFERENCED COATING MATERIALS

	VOC (g/L)				
Specification Designation	Specified Maximum	Typical[a]	Generic Type/ Classifi-cations	Gloss	Colors
FS TT-C-555[c]			textured coating Type I, interior		all
CID A-A-1500		250	latex filler		tints, white
CID A-A-1558		500	stencil paint Class 1, regular	low	all
MIL-P-14105		480	heat-resisting paint (to 1400 degrees F)	flat	all
MIL-DTL-24441	340		epoxy-polyamide primers/paint Type IV, 3 coat		service colors
			/29 primer		green (595 color:#24272)
			/30 paint		haze gray (595 color:#26270)
			/31 paint	semi	white (595 color:#27886)
			/35 paint		red (595 color:#20109)
			/36 paint		No. 50 gray (595 color:#26622)
			/37 paint		yellow (595 color:#23695)
			/38 paint	low	black (no color # specified)
			/39 paint		yellow (no color # specified)
			/40 paint		red (no color # specified)
CID A-A-50557	250		acrylic or modified acrylic		any

CHARACTERISTICS OF REFERENCED COATING MATERIALS

Specification Designation	VOC (g/L) Specified Maximum	Typical[a]	Generic Type/ Classifications	Gloss	Colors
			waterborne primer		
MIL-C-85285	340		urethane coating Type II	gloss semi-gloss	any

[a] Compliant materials are generally available from regional suppliers.

[b] Metallic pigment, 0.5 lb/gal.

1113, the intended use.

[c] Waterborne coatings equivalent to this specification are available.

****

FS TT-P-19	(Rev. D; Am. 1) Paint, Latex (Acrylic Emulsion, Exterior Wood and Masonry)
FS TT-P-28	(Rev. G) Paint, Aluminum, Heat Resisting (1200 DEG. F)
FS TT-P-29	(Rev. K) Paint, Latex Base
FS TT-P-38	(Rev. E) Paint, Aluminum (Ready-Mixed)
FS TT-E-487	(Rev. E; Am. 1) Enamel: Floor and Deck
FS TT-C-542	(Rev. E) Coating, Polyurethane, Oil-Free, Moisture Curing
FS TT-C-555	(Rev. B; Am. 1) Coating, Textured (for Interior and Exterior Masonry Surfaces)
FS TT-P-664	(Rev. D) Primer Coating, Alkyd, Corrosion-Inhibiting, Lead and Chromate Free, VOC-Compliant
FS TT-S-708	(Rev. A; Am. 2) Stain, Oil: Semi-Transparent, Wood, Exterior
FS TT-S-711	(Rev. C) Stain; Oil Type, Wood, Interior

FS TT-E-2784	(Rev. A) Enamel (Acrylic Emulsion, Exterior)

MASTER PAINTERS INSTITUTE (MPI)Org

MPI 1	(Mar 2000) Aluminum Paint
MPI 2	(Mar 2000) Aluminum Heat Resistant Enamel (up to 427 C and 800 F
MPI 4	(Mar 2000) Interior/Exterior Latex Block Filler
MPI 5	(Mar 2000) Exterior Alkyd Wood Primer
MPI 7	(Mar 2000) Exterior Oil Wood Primer
MPI 9	(Mar 2000) Exterior Alkyd Enamel
MPI 10	(Mar 2000) Exterior Latex, Flat
MPI 11	(Mar 2000) Exterior Latex, Semi-Gloss
MPI 13	(Mar 2000) Exterior Semi-Transparent Stain (solvent based)
MPI 14	(Mar 2000) Exterior Solid Color Stain (solvent based)
MPI 17	(Mar 2000) Plastic Primer (water based)
MPI 22	(Mar 2000) High Heat Resistant Coating
MPI 28	(Mar 2000) Exterior Marine Spar Varnish, Gloss
MPI 31	(Mar 2000) Polyurethane, Moisture Cured, Clear Gloss
MPI 41	(Mar 2000) Latex Stucco and Masonry Coating (coarse texture)
MPI 42	(Mar 2000) Latex Stucco and Masonry Coating (medium texture)
MPI 45	(Mar 2000) Interior Primer Sealer
MPI 47	(Mar 2000) Interior Alkyd, Semi-Gloss
MPI 48	(Mar 2000) Interior Alkyd, Gloss
MPI 49	(Mar 2000) Interior Alkyd, Flat
MPI 50	(Mar 2000) Interior Latex Primer Sealer

MPI 51	(Mar 2000) Interior Alkyd, Eggshell
MPI 52	(Mar 2000) Interior Latex, Gloss Level 3
MPI 53	(Mar 2000) Interior Latex, Flat
MPI 54	(Mar 2000) Interior Latex, Semi-Gloss
MPI 56	(Mar 2000) Interior Alkyd Dry Fog/Fall
MPI 57	(Mar 2000) Interior Oil Modified Clear Urethane, Satin
MPI 73	(Mar 2000) Interior Varnish, Flat
MPI 74	(Mar 2000) Interior Varnish, Semi-Gloss
MPI 75	(Mar 2000) Interior Varnish, Gloss
MPI 79	(Mar 2000) Marine Alkyd Metal Primer
MPI 90	(Mar 2000) Interior Wood Stain, Semi-Transparent
MPI 91	(Mar 2000) Wood Filler Paste
MPI 94	(Mar 2000) Exterior Alkyd, Semi-Gloss
MPI 98	(Mar 2000) High Build Epoxy Coating
MPI 101	(Mar 2000) Cold Curing Epoxy Primer
MPI 110	(Mar 2000) Interior/Exterior High Performance Acrylic
MPI 113	(Mar 2000) Elastomeric Coating
MPI 114	(Mar 2000) Interior Latex, High Gloss (acrylic)
MPI 119	(Mar 2000) Exterior Latex, High Gloss (acrylic)
MPI 134	(Mar 2000) Waterborne Galvanized Primer
MPI 138	(Mar 2000) High Performance Latex, White and Tints - MPI Gloss Level 2
MPI 139	(Mar 2000) High Performance Latex, White and Tints - MPI Gloss Level 3
MPI 141	(Mar 2000) High Performance Semigloss

Latex White and Tints - MPI Gloss Level 5

MILITARY SPECIFICATIONS (MIL)

MIL-DTL-24441	(Rev. C) Paint, Epoxy-Polyamide
MIL-C-24667	(Rev. A) Coating System, Nonskid, for Roll or Spray Application (Metric)
MIL-PRF-85285	(Rev. C) Coatings: Polyurethane, High-Solids

MILITARY STANDARDS (MIL-STD)

MIL-STD-101	(Rev. B) Color Code for Pipelines and for Compressed Gas Cylinders

STEEL STRUCTURES PAINTING COUNCIL (SSPC)

SSPC Guide 6	(1997) Containing Debris Generated During Paint Removal Operations
SSPC Guide 7	(1995) Disposal of Lead-Contaminated Surface Preparation Debris
SSPC QP 1	(1989) Evaluating Qualifications of Painting Contractors (Field Application to Complex Structures)
SSPC PA 1	(2000) Shop, Field, and Maintenance Painting
SSPC PA 3	(1995) Safety in Paint Application
SSPC VIS 3	(1995) Visual Standard for Power-and Hand-Tool Cleaned Steel (Standard Reference Photographs)
SSPC SP 1	(1982) Solvent Cleaning
SSPC SP 2	(1995) Hand Tool Cleaning
SSPC SP 3	(1995) Power Tool Cleaning
SSPC SP 5	(1994) White Metal Blast Cleaning
SSPC SP 6	(1994) Commercial Blast Cleaning
SSPC SP 7	(1994) Brush-Off Blast Cleaning
SSPC SP 10	(1994) Near-White Blast Cleaning
SSPC SP 12	(1995) Surface Preparation and Cleaning of Steel and Other Hard Materials by High-and

	Ultra high-Pressure Water Jetting Prior to Recoating
SSPC Paint 20	(1991) Zinc-Rich Primers (Type I, "Inorganic," and Type II, "Organic")
SSPC Paint 22	(1991) Epoxy-Polyamide Paints (Primer, Intermediate, and Topcoat)
SSPC Paint 24	(1991) Latex Semi-Gloss Exterior Topcoat
SSPC Paint 104	(1991) White or Tinted Alkyd Paint

1.2 SUBMITTALS

****

NOTE: Where a "G" in submittal tags follows a submittal item, it indicates Government approval for that item. Add "G" in submittal tags following any added or existing submittal items deemed sufficiently critical, complex, or aesthetically significant to merit approval by the Government. Submittal items not designated with a "G" will be approved by the QC organization.

****

Submit the following in accordance with Section 01330, "Submittal Procedures."

All federal and CID Paint specifications listed in cross-over lists on paint tables of 09900, "Paints and Coatings", are considered equal to the corresponding MPI paints for specification purposes. The current MPI, "Approved Product List" of manufacturers and their approved paint systems, as of the date of contract award, will be used to determine compliance with the submittal requirements of this specification. The Contractor may choose to use a subsequent MPI "approved Product List", however, only one list may be used for the entire contract.

SD-02 Shop Drawings

Piping identification

Submit color stencil codes.

SD-03 Product Data

Coating; G

Sealant

For each type of coating, sealant, or other product furnished, submit data from the manufacturer's paint laboratory indicating that the product conforms to requirements of the referenced

specification.

SD-04 Samples

Color; G

Submit manufacturer's samples of paint colors. Cross reference color samples to color scheme as indicated.

SD-08 Manufacturer's Instructions

Application instructions

Manufacturer's material safety data sheets

Submit Manufacturer's material safety data sheets for coatings, solvents, and other potentially hazardous materials, as defined in FED-STD-313.

SD-07 Certificates

Applicator's qualifications

Evidence of acceptable variation; G

1.3 APPLICATOR'S QUALIFICATIONS

****
NOTE: Use bracket option below concerning SSPC QP 1 only when industrial coatings are required. Painting qualifications for projects such as BEQ's, training facilities and general administration buildings do not require QP 1 certification.
****

[a. Submit evidence that applicator has met certification requirements of SSPC Painting Contractor Certification Program as described in SSPC QP 1]

b. Submit evidence that applicator has satisfactorily applied paint by airless spray at minimum of two sites. Indicate names and locations of sites, and type and design of equipment used, including safety devices.

1.4 EVIDENCE OF ACCEPTABLE VARIATION

****
NOTE: Material substitutions should not be allowed unless the Contractor can prove by comparative analysis that the substitute is in fact as good as or better than the specified material.
****

If a product proposed for use does not conform to requirements of the

referenced specification, submit for approval to the Contracting Officer, evidence from the paint manufacturer's laboratory that the proposed product is either equal to or better than the product specified. The submittal shall include the following:

a. Identification of the proposed substitute;

b. Reason why the substitution is necessary;

c. A comparative analysis of the specified product and the proposed substitute, including tabulations of the composition of pigment and vehicle;

d. The differences between the specified product and the proposed substitute; and

e. Other information necessary for an accurate comparison of the proposed substitute and the specified product.

1.5 QUALITY ASSURANCE

1.5.1 Qualifications of Airless Spray Applicators

Satisfactory application of paint by airless spray at a minimum of two sites.

1.5.2 Field Samples and Tests

The Government will take 0.5 liter one pint samples of paint at random from the products delivered to the job site and test them to verify that the products either conform to the referenced specifications or the approved substitution. Products which do not conform shall be removed from the job site and replaced with new products that conform to the referenced specification or the approved substitution.

1.6 REGULATORY REQUIREMENTS

[1.6.1 Environmental Protection

****
NOTE: This information is a regional requirement. Only use for SOUTHWESTNAVFACENGCOM projects and other areas as applicable. Some 33 states require control of hydrocarbon emissions - either volatile organic compounds (VOC) content or photochemical reactivity.
****

In addition to requirements specified elsewhere for environmental protection, provide coating materials that conform to the restrictions of the [California Air Resources Board (CARB)] [and] [local Air Pollution Control District] [_____] regional jurisdiction. Notify Contracting Officer of any paint specified herein which fails to conform to Air Quality Management District Rules (cited in Appendix A) for the location of the

project. In localities where specified coating or paint is prohibited, the Contracting Officer may direct substitution of acceptable coating system.

]1.6.2 Lead Content

Do not use coatings having a lead content over 0.06 percent by weight of nonvolatile content.

1.6.3 Chromate Content

Do not use coatings containing zinc-chromate or strontium-chromate.

1.6.4 Asbestos Content

Materials shall not contain asbestos.

1.6.5 Mercury Content

Materials shall not contain mercury or mercury compounds.

1.6.6 Silica Sand

Materials shall not contain free crystiltene silica.

1.6.7 Human Carcinogens

Materials shall not contain ACGIH TLV-BKLT and ACGIH TLV-DOC confirmed human carcinogens (A1) or suspected human carcinogens (A2).

1.7 PACKAGING, LABELING, AND STORAGE

Paints shall be in sealed containers that legibly show the contract specification number, designation name, formula or specification number, batch number, color, quantity, date of manufacture, manufacturer's formulation number, manufacturer's directions including any warnings and special precautions, and name and address of manufacturer. Pigmented paints shall be furnished in containers not larger than 20 liters 5 gallons. Paints and thinners shall be stored in accordance with the manufacturer's written directions, and as a minimum, stored off the ground, under cover, with sufficient ventilation to prevent the buildup of flammable vapors, and at temperatures between 4 to 35 degrees C 40 to 95 degrees F.

1.8 SAFETY METHODS

Apply coating materials using safety methods and equipment in accordance with the following:

1.8.1 Safety Methods Used During Coating Application

Comply with the requirements of SSPC PA 3.

1.8.2 Toxic Materials

To protect personnel from overexposure to toxic materials, conform to the

most stringent guidance of:

a. The chemical manufacturer when using mineral spirits, or other chemicals. Use impermeable gloves, chemical goggles or faceshield, and other recommended protective clothing and equipment to avoid exposure of skin, eyes, and respiratory system. Conduct work in a manner to minimize exposure of building occupants and the general public.

****
NOTE: Delete following paragraph if no lead is contained in existing coating systems.
****

[b. The appropriate OSHA standard in 29 CFR 1910.1025 and 29 CFR 1926.62 for surface preparation on painted surfaces containing lead. Removal and disposal of coatings which contain lead is specified in Section 13283, "Removal and Disposal of Lead-Containing Paint." Additional guidance is given in SSPC Guide 6 and SSPC Guide 7.]

****
NOTE: Delete following paragraph if no asbestos is contained in existing coating systems.
****

[c. The appropriate OSHA standards in 29 CFR 1910.1001 for surface preparation of painted surfaces containing asbestos. Removal and disposal of coatings which contain asbestos materials is specified in Section 13281, "Engineering Control of Asbestos Containing Materials."]

d. 29 CFR 1910.1000.

e. ACGIH TLV-BKLT, threshold limit values.

f. Manufacturer's material safety data sheets (MSDS).

1.9 ENVIRONMENTAL CONDITIONS

1.9.1 Exterior Coatings

Do not apply coating to surfaces during foggy or rainy weather, or under the following surface temperature conditions:

a. Less than 3 degrees C 5 degrees F above dew point;

b. Below 4 degrees C 40 degrees F (for oil-based paints), 10 degrees C 50 degrees F (for latex paints) or over 35 degrees C 95 degrees F, unless approved by the Contracting Officer.

1.9.2 Interior Coatings

Apply coatings when surfaces to be painted are dry and the following

surface temperatures can be maintained:

a. Between 4 and 35 degrees C 40 and 95 degrees F during application of enamels and varnishes;

b. Between 10 and 35 degrees C 50 and 95 degrees F during application of other coatings.

1.10 COLOR SELECTION

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NOTE: Complete color schedule should be included on drawings.

****

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NOTE: If the project includes painting of Shore-To-Ship Utility connections, insert:

1. Color Coding For Shore-To-Ship Utility Connections: Paint hose connection fittings and shut-off valves the designated color. In addition to color coding provide 50 mm 2 inch high stenciled letters using black stencil paint, CID A-A-1558, clearly designating service for each connection.

Color Coding for Shore-to-Ship Utility Connections

Service	Color	FED-STD-595 No.
Potable Water*	Blue	15044
Water Provided for Fire Protection**	Red	11105
Chilled Water	Striped Blue/White	15044/17886
Oily Waste Water	Striped Yellow/Black	13538/17038
Sewer	Gold	17043
Steam	White	17886
High Pressure Air	Gray	16081
Low Pressure Air	Tan	10324
Fuel	Yellow	13655

*** This includes connections serving domestic functions.**

**** This includes non-potable salt water or, at some locations, fresh water connections provided for fire protection (may also include**

Color Coding for Shore-to-Ship Utility Connections

Service	Color	FED-STD-595 No.

flushing and cooling requirements). Note: This does not include waterfront fire hydrants.

****

Colors of finish coats shall be as indicated or specified. Where not indicated or specified, colors shall be selected by the Contracting Officer. Manufacturers' names and color identification are used for the purpose of color identification only. Named products are acceptable for use only if they conform to specified requirements. Products of other manufacturers are acceptable if the colors approximate colors indicated and the product conforms to specified requirements.

1.11 LOCATION AND SURFACE TYPE TO BE PAINTED

****

NOTE: Drawings should indicate type and extent of work. Specific quantities should not be cited in the specification. Where applicable, indicate:

1. Reputtying and Reglazing: Replacement of [____] linear meter feet of existing putty or glazing compound with new material.

2. Resealing of Existing Exterior Joints: Replacement of linear meter feet of sealant or calking with new sealant.

3. Removal of Existing Coatings: Removal of [_____] square meter feet of existing coating by methods specified for each substrate material.

****

1.11.1 Painting Included

Where a space or surface is indicated to be painted, include the following unless indicated otherwise.

a. Surfaces behind portable objects and surface mounted articles readily detachable by removal of fasteners, such as screws and bolts.

b. New factory finished surfaces that require identification or color coding and factory finished surfaces that are damaged during performance of the work.

c. Existing coated surfaces that are damaged during performance of the work.

1.11.2 Painting Excluded

Do not paint the following unless indicated otherwise.

a. Surfaces concealed and made inaccessible by panelboards, fixed ductwork, machinery, and equipment fixed in place.

b. Surfaces in concealed spaces. Concealed spaces are defined as enclosed spaces above suspended ceilings, furred spaces, attic spaces, crawl spaces, and chases.

c. Steel to be embedded in concrete.

d. Copper, stainless steel, aluminum, brass, and lead except existing coated surfaces.

1.11.3 Exterior Painting

Includes new surfaces[, existing coated surfaces,] [and] [existing uncoated surfaces,] of the building[s] and appurtenances as indicated. Also included are existing coated surfaces made bare by cleaning operations.

1.11.4 Interior Painting

Includes new surfaces[, existing uncoated surfaces,] [and] [existing coated surfaces] of the building[s] and appurtenances as indicated and existing coated surfaces made bare by cleaning operations. Where a space or surface is indicated to be painted, include the following items, unless indicated otherwise.

a. Exposed columns, girders, beams, joists, and metal deck; and

b. Other contiguous surfaces.

1.11.5 Mechanical and Electrical Painting

Includes field coating of [interior] [and] [exterior] new [and existing] surfaces.

a. Where a space or surface is indicated to be painted, include the following items unless indicated otherwise.

(1) Exposed piping, conduit, and ductwork;

(2) Supports, hangers, air grilles, and registers;

(3) Miscellaneous metalwork and insulation coverings.

[b. Do not paint the following, unless indicated otherwise:

[(1) New zinc-coated, aluminum, and copper surfaces under insulation]

[(2) New aluminum jacket on piping]

[(3) New interior ferrous piping under insulation].]

[1.11.5.1 Fire Extinguishing Sprinkler Systems

Clean, pretreat, prime, and paint new fire extinguishing sprinkler systems including valves, piping, conduit, hangers, supports, miscellaneous metalwork, and accessories. Apply coatings to clean, dry surfaces, using clean brushes. Clean the surfaces to remove dust, dirt, rust, and loose mill scale. Immediately after cleaning, provide the metal surfaces with one coat of pretreatment primer applied to a minimum dry film thickness of 0.0076 mm 0.3 mil, and one coat of zinc molybdate primer applied to a minimum dry film thickness of 0.025 mm 1.0 mil. Shield sprinkler heads with protective covering while painting is in progress. Upon completion of painting, remove protective covering from sprinkler heads. Remove sprinkler heads which have been painted and replace with new sprinkler heads. Provide primed surfaces with the following:

a. Piping in Unfinished Areas: Provide primed surfaces with one coat of red alkyd gloss enamel applied to a minimum dry film thickness of 0.25 mm 1.0 mil in attic spaces, spaces above suspended ceilings, crawl spaces, pipe chases, mechanical equipment room, and spaces where walls or ceiling are not painted or not constructed of a prefinished material. [In lieu of red enamel finish coat, provide piping with 50 mm 2 inch wide red enamel bands or self-adhering red plastic bands spaced at maximum of 6 meters 20 foot intervals.]

b. Piping in Finished Areas: Provide primed surfaces with two coats of paint to match adjacent surfaces, except provide valves and operating accessories with one coat of red alkyd gloss enamel applied to a minimum dry film thickness of 0.025 mm 1.0 mil. Provide piping with 50 mm 2 inch wide red enamel bands or self-adhering red plastic bands spaced at maximum of 6 meters 20 foot intervals throughout the piping systems.

]1.11.6 Exterior Painting of Site Work Items

Field coat the following items:

	New Surfaces	Existing Surfaces
a.	[_____]	[_____]
b.	[_____]	[_____]
c.	[_____]	[_____]

PART 2 PRODUCTS

2.1 MATERIALS

Conform to the coating specifications and standards referenced in PART 3.

2.1.1 Latex Block Filler

CID A-A-1500.

PART 3 EXECUTION

****
NOTE: Exercise caution when deviating from paint systems listed in tables of "PART 3 EXECUTION." Verify compatibility of paint systems substituted.
****

3.1 PROTECTION OF AREAS AND SPACES

Prior to surface preparation and coating applications, remove, mask, or otherwise protect, hardware, hardware accessories, machined surfaces, radiator covers, plates, lighting fixtures, public and private property, and other such items not to be coated that are in contact with surfaces to be coated. Following completion of painting, workmen skilled in the trades involved shall reinstall removed items. Restore surfaces contaminated by coating materials, to original condition and repair damaged items.

[3.2 REPUTTYING AND REGLAZING

****
NOTE: Include this paragraph only for projects involving painting of existing windows but not including a glazing section. Reputtying work should be covered in glazing section if such a section is used in the project specifications.
****

Remove cracked, loose, and defective putty or glazing compound on glazed sash and provide new putty or glazing compound. Where defective putty or glazing compound constitutes 30 percent or more of the putty at any one light, remove the glass and putty or glazing compound and reset the glass. Remove putty or glazing compound without damaging sash or glass. Clean rabbets to bare wood or metal and prime prior to reglazing. Putty for wood sash shall conform to CID A-A-378. Glazing compound for metal sash shall conform to ASTM C 669. Patch surfaces to provide smooth transition between existing and new surfaces. Finish putty or glazing compound to a neat and true bead. Allow glazing compound time to cure, in accordance with manufacturer's recommendation, prior to coating application. Allow putty to set one week prior to coating application.

][3.3 RESEALING OF EXISTING EXTERIOR JOINTS

****
NOTE: Include this paragraph only for projects involving resealing of existing exterior joints but not including a sealant section. Such work should be covered in sealant section if such a section is used in the project specifications.
****

3.3.1 Surface Condition

Surfaces shall be clean, dry to the touch, and free from frost, moisture, grease, oil, wax, lacquer, paint, defective backstop, or other matter that would prevent or impair adhesion. Where adequate grooves have not been provided, clean out to a depth of 13 mm 1/2 inch and grind to a minimum width of 6 mm 1/4 inch without damage to adjoining work. Grinding shall not be required on metal surfaces.

3.3.2 Backstops

In joints more than 13 mm 1/2 inch deep, install glass fiber roving or neoprene, butyl, polyurethane, or polyethylene foams free of oil or other staining elements as recommended by sealant manufacturer. Backstop material shall be compatible with sealant. Do not use oakum and other types of absorptive materials as backstops.

3.3.3 Primer and Bond Breaker

Install the type recommended by the sealant manufacturer.

3.3.4 Ambient Temperature

Between 4 and 38 degrees C 40 and 100 degrees F when applying sealant.

3.3.5 Exterior Sealant

For joints in vertical surfaces, provide ASTM C 920, Type S or M, Grade NS, Class 25, Use NT. For joints in horizontal surfaces, provide ASTM C 920, Type S or M, Grade P, Class 25, Use T. Color(s) shall be selected by the Contracting Officer. Apply the sealant in accordance with the manufacturer's printed instructions. Force sealant into joints with sufficient pressure to fill the joints solidly. Sealant shall be uniformly smooth and free of wrinkles.

3.3.6 Cleaning

Immediately remove fresh sealant from adjacent areas using a solvent recommended by the sealant manufacturer. Upon completion of sealant application, remove remaining smears and stains and leave the work in a clean condition. Allow sealant time to cure, in accordance with manufacturer's recommendations, prior to coating.

]3.4 SURFACE PREPARATION

Remove dirt, splinters, loose particles, grease, oil, [disintegrated coatings,] and other substances deleterious to coating performance as specified for each substrate.

[3.4.1 Existing Coated Surfaces With No Defects

****

NOTE: Delete if there are no existing surfaces to receive coatings.

****

Before application of coatings, perform the following on surfaces covered by soundly-adhered coatings, defined as those which cannot be removed with a putty knife:

a. Wipe previously painted surfaces to receive solvent-based coatings, except stucco and similarly rough surfaces clean with a clean, dry cloth saturated with mineral spirits, CID A-A-2904. Allow surface to dry. Wiping shall immediately precede the application of the first coat of any coating, unless specified otherwise.

b. Sand existing enamel and other glossy surfaces to remove gloss. Brush, and wipe clean with a dry cloth.

c. The requirements specified are minimum. Comply also with the application instructions of the paint manufacturer.

][3.4.2 Existing Coated Surfaces with Minor Defects

[Sand, spackle, and treat minor defects to render them smooth. Minor defects are defined as scratches, nicks, cracks, gouges, spalls, alligatoring, chalking, and irregularities due to partial peeling of previous coatings.] [Remove chalking by sanding [or blasting] so that when tested in accordance with ASTM D 4214, the chalk rating is not less than 8.]

][3.4.3 Removal of Existing Coatings

Remove existing coatings from the following surfaces:

a. Surfaces containing large areas of minor defects;

b. Surfaces containing more than 20 percent peeling area; and

c. Surfaces designated by the Contracting Officer, such as surfaces where rust shows through existing coatings.

][3.4.4 Substrate Repair

a. Repair substrate surface damaged during coating removal;

b. Sand edges of adjacent soundly-adhered existing coatings so they are tapered as smooth as practical to areas involved with coating removal; and

c. Clean and prime the substrate as specified.

]3.5 PREPARATION OF METAL SURFACES

3.5.1 Existing and New Ferrous Surfaces

****

NOTE: Existing coating systems need to be defined

compositionally before recoating:

1. Hazardous Materials: When planning either partial or full removal of existing coatings, regulatory restrictions and procedures shall be followed. Records establishing the composition of materials in the coating systems, if available, may assist in a preliminary review of planned surface preparation and disposal. Generally an overall assessment of applicable regulations for personnel and environmental protection will be required, with appropriate sampling and testing, followed by use of proper material control procedures.

2. Compatibility of the existing coating system with a planned repair or overcoating system should be determined by procedures such as the following:

a. Identification of the existing topcoat and any undercoats that will be exposed, by consulting local records.

b. If binder extraction is possible, ASTM D 2621, "Infrared Identification of Vehicle Solids from Solvent-Reducible Paints," can be used for vehicle identification.

c. General compatibility considerations and chart listings of expected relationships between binder types are given in Naval Civil Engineering Laboratory Tech Data Sheet 77-19, "Incompatibility of Paints." Consult coating specialist codes regarding questionable compatibilities indicated in the chart.

d. For some maintenance operations, use of ASTM D 5064, "Standard Practice for Conducting a Patch Test to Assess Coating Compatibility," may be warranted.

Surface preparation procedures should be compliant with any local or base restrictions. For cleaning or blasting ferrous surfaces, select applicable options from the table below.

Ferrous Surface Preparation

SSPC Blasting/Cleaning Levels[a] - Primer Types/Exposures

Exposure[b]		
Mild	**Moderate**	**Severe[c]**

Ferrous Surface Preparation

SSPC Blasting/Cleaning Levels[a] - Primer Types/Exposures

	Exposure[b]		
	Mild	Moderate	Severe[c]
Primer Type	alkyd/oil latex oleoresinous phenolic	alkyd/oil latex oleoresinous phenolic	epoxy silicone inorganic zinc-rich
Surface Condition			
Uncoated			
Oil, grease, dirt	SP 1	for all moderate conditions, select from "mild" or "severe" for intended performance level	SP 10, SP 12 WJ2 or SP 5 SP 12 WJ1
Localized corrosion - mill scale, rust	SP 2, SP 3, or SP 7 SP 12 WJ-4		AS ABOVE
Extensive deterioration	SP 6[d] SP 12 WJ-3		AS ABOVE
Shop coated			
Oil, grease, dirt	[e]		AS ABOVE
Localized damage to be spot repaired	SP 2, SP 3, or SP 7, SP 12 WJ-4		AS ABOVE
Extensive deterioration	SP 6[d], SP 12 WJ-3		AS ABOVE
Existing coating			
Oil, grease	[e]	[e]	SP 1
Chalking, foreign matter other than oil or grease, localized deterioration	[f]		[g]

Ferrous Surface Preparation

SSPC Blasting/Cleaning Levels[a] - Primer Types/Exposures

	Exposure[b]		
	Mild	Moderate	Severe[c]
Extensive deterioration	SP 6[d], SP 12 WJ-3		SP 10, SP 12 WJ2 or SP 5 SP 12 WJ1

[a] If it is not possible to abrasive blast or use water jetting, SP 11 is recommended. It is considered equivalent to SP 6. SP 11 is also preferred wherever SP 2 or SP 3 are shown in the Table.

[b] These are minimum requirements. A high-performing system may be a better choice for longer performance.

[c] For marine, chemical, or immersion service, or application of heat resistant or nonslip floor coatings. SP 5 is preferred for zinc-rich primers, and for extremely severe environments where long-term performance is desired.

[d] Use water jetting to SP 12 WJ-3, as alternate to SP 6 degree of cleanliness.

[e] Use only the steam clean, or non-alkaline detergent solutions of SP 1.

[f] First, remove chalk and dirt with a non-alkaline detergent solution, and follow with power wash at 2000 psi. Second, spot clean, in order of preference by SP 6, SP 11, SP 7, SP 3, or SP 2.

[g] First, remove chalk and dirt with a non-alkaline detergent solution, and follow with power wash at 2000 psi. Second, spot clean, in order of preference, by SP 10, SP 6, or SP 11.

[h] The water jetting standard is a cooperative standard between SSPC and NACE designated SSPC SP 12/NACE 5. There are four levels of water jetting cleanliness and they reflect the four levels of abrasive blast cleanliness but direct correlation is inaccurate or inappropriate. The four levels are (best to worst): WJ-1, WJ-2, WJ-3, and WJ-4. They are equivalent to the abrasive blast standards SSPC SP 5, SP 10, SP 6, and SP 7 or NACE 1, 2, 3, and 4. The standard also includes three levels of cleanliness for nonvisual contaminants, SC-1, SC-2, and SC-3. The preferred level of cleanliness is between SC-1 or SC-2.

****

a. Shop-coated Surfaces and Small Areas That Contain Rust, Mill Scale and Other Foreign Substances: Solvent clean in accordance with SSPC SP 1 to remove oil and grease. Where shop coat is missing or damaged, clean according to [SSPC SP 2], [SSPC SP 3], [SSPC SP 6], or [SSPC SP 10]. [Brush-off blast remaining surface in accordance with SSPC SP 7]; [Water jetting to SSPC 12 WJ-4 may be used to remove loose coating and other loose materials. Use inhibitor as recommended by coating manufacturer to prevent premature rusting.]

b. Surfaces With More Than 20 Percent Rust, Mill Scale, and Other Foreign Substances: Clean entire surface in accordance with [SSPC SP 6]/[SSPC SP 12 WJ-3] [SSPC SP 10]/[SSPC SP 12 WJ-2] .

****

NOTE: Regarding text below, for new or existing uncoated surfaces requiring nonslip coating, specify MIL-C-24667. For rusted surfaces, modify surface preparation requirements to include near white blast cleaning in accordance with SSPC SP 10 prior to coating application.

****

[c. Metal Floor Surfaces to Receive Nonslip Coating: Clean in accordance with SSPC SP 10 [SSPC SP 12 WJ-2].]

3.5.2 Final Ferrous Surface Condition:

****

NOTE: Verify there are no local or base restrictions on use of abrasive blasting. Specify cleaning options as follows:

Type Coating	**Level of Cleaning, SSPC SP ...**
a. Latex or Alkyd	**2,3,6 or SP 12 WJ-2.(7 and 10, SP 12 WJ-2 or SP 12 WJ-1 may be left in as Contractor options)**
b. High Performance (i.e. Epoxy, Urethane, others)	**7,10**

****

For tool cleaned surfaces, cleaned surface shall be similar to photographs in SSPC VIS 3 as follows:

Degree of Cleaning	100 Percent Adherent Mill Scale	Mill Scale and Rust	100 Percent Rust	100 Percent Rust with Pits
Hand Tool Cleaning (SSPC SP 2/Wire Brush)	A SP2	B SP 2	C SP 2	D SP 2
Power Tool Cleaning (SSPC SP 3/Power Wire Brush)	A SP3/PWB	B SP3/PWB	C SP3/PWB	D SP3/PWB
Power Tool Cleaning (SSPC SP 3/Sanding Disc)	A SP3/SD	B SP3/SD	C SP3/SD	D SP3/SD
Power Tool Cleaning (SSPC SP 3/Needle Gun)	A SP3/NG	B SP3/NG	C SP3/NG	D SP3/NG

For abrasive blast cleaned surfaces, cleaned surface shall be similar to photographs in SSPC VIS 1-89 as follows:

White Metal Blast Cleaning SSPC SP 5	A SP 5 ***	B SP 5	C SP 5	D SP 5
Commercial Blast Cleaning SSPC SP 6	**	B SP 6	C SP 6	D SP 6
Brush-Off Blast Cleaning SSPC SP 7	*	B SP 7	C SP 7	D SP 7
[Near White Blast Cleaning SSPC SP 10]	A SP 10	B SP 10	C SP 10	D SP 10

Note: (1) No photograph is available or recommended for comparison.

* Standard photograph not provided because of wide variations in appearance possible when brush-off blast cleaning adherent mill scale.

** No photograph available because this condition cannot normally be attained when removing adherent mill scale.

For surfaces cleaned by water jetting, cleaned surface shall be similar to photographs in SSPC Vis 4 as follows: Interim Guide - Photographs not available for this version.

3.5.3 Galvanized Surfaces

a. New or Existing Galvanized Surfaces With Only Dirt and Zinc Oxidation Products: Clean with solvent, steam, or non-alkaline detergent solution in accordance with SSPC SP 1. If the galvanized metal has been passivated or stabilized, the coating shall be completely removed by brush-off abrasive blast or other

treatment, or the surface shall be primed with a primer which is specifically recommended by the paint manufacturer for use on passivated or stabilized galvanized steel. For new galvanized steel to be coated, if absence of hexavalent stain inhibitors is not documented, test as described in ASTM D 2092, Appendix X2, and remove by one of the methods described therein.

****
NOTE: Delete the text below if there are no existing surfaces to receive coatings. For paragraph entitled "Galvanized with Slight Coating Deterioration or with Little or No Rusting," verify there are no local or base restrictions on the use of abrasive blasting.
****

b. Galvanized with Slight Coating Deterioration or with Little or No Rusting: Water jetting to SSPC SP 12 WJ3 to remove loose coating from surfaces with less than 20 percent coating deterioration and no blistering, peeling, or cracking. Use inhibitor as recommended by the coating manufacturer to prevent rusting.

****
NOTE: Delete the text below if there are no existing surfaces to receive coatings. For paragraph entitled "Galvanized with Severe Deteriorated Coating or Severe Rusting," verify there are no local or base restrictions on the use of abrasive blasting.
****

c. Galvanized With Severe Deteriorated Coating or Severe Rusting: [Water jet to SSPC SP WJ3 degree of cleanliness.] [Spot abrasive blast rusted areas as described for steel in SSPC SP 6, and abrasive blast as described for steel in SSPC SP 7, to remove existing coating.]

3.5.4 Aluminum, Other Non-Galvanized, and Non-Ferrous Surfaces

a. Surface Cleaning: Solvent clean in accordance with SSPC SP 1 and wash with mild non-alkaline detergent to remove dirt and water soluble contaminants.

3.5.5 Terne-Coated Metal Surfaces

Solvent clean surfaces with mineral spirits, CID A-A-2904. Wipe dry with clean, dry cloths.

3.5.6 Existing Surfaces with a Bituminous Coating

Remove chalk, mildew, and other loose material by washing with a solution of 0.20 liter 1/2 cup trisodium phosphate, 0.1 liter 1/4 cup household detergent, 1.6 liters one quart 5 percent sodium hypochlorite solution and 4.8 liters 3 quarts of warm water.

3.6 PREPARATION OF CONCRETE AND CEMENTITIOUS SURFACE

3.6.1 Concrete and Masonry

a. Surface Cleaning: Remove the following deleterious substances.

(1) Dirt, [Chalking,] Grease, and Oil: Wash new [and existing uncoated] surfaces with a solution composed of 0.2 liter 1/2 cup trisodium phosphate, 0.1 liter 1/4 cuphousehold detergent, and 6.4 liters 4 quarts of warm water. Then rinse thoroughly with fresh water. [Wash existing coated surfaces with a suitable detergent and rinse thoroughly.] For large areas, water blasting may be used.

(2) Fungus and Mold: Wash [new] [, existing coated,] [and existing uncoated] surfaces with a solution composed of 0.2 liter 1/2 cup trisodium phosphate, 0.1 liter 1/4 cup household detergent, 1.6 liters 1 quart 5 percent sodium hypochlorite solution and 4.8 liters 3 quarts of warm water. Rinse thoroughly with fresh water.

(3) Paint and Loose Particles: Remove by wire brushing.

(4) Efflorescence: Remove by scraping or wire brushing followed by washing with a 5 to 10 percent by weight aqueous solution of hydrochloric (muriatic) acid. Do not allow acid to remain on the surface for more than five minutes before rinsing with fresh water. Do not acid clean more than 0.4 square meter 4 square feet of surface, per workman, at one time.

[(5) Removal of Existing Coatings: For surfaces to receive textured coating FS TT-C-555, remove existing coatings including soundly adhered coatings if recommended by textured coating manufacturer.]

b. Cosmetic Repair of Minor Defects: Repair or fill mortar joints and minor defects, including but not limited to spalls, in accordance with manufacturer's recommendations and prior to coating application.

c. Allowable Moisture Content: Latex coatings may be applied to damp surfaces, but not to surfaces with droplets of water. Do not apply epoxies to damp surfaces as determined by ASTM D 4263. Allow surfaces to cure a minimum of 30 days before painting.

3.6.2 Gypsum Board, Plaster, and Stucco

a. Surface Cleaning: Plaster and stucco shall be clean and free from loose matter; gypsum board shall be dry. Remove loose dirt and dust by brushing with a soft brush or rubbing with a dry cloth prior to application of the first coat material.

b. Repair of Minor Defects: Prior to painting, repair joints, cracks, holes, surface irregularities, and other minor defects

with patching plaster or spackling compound and sand smooth.

c. Allowable Moisture Content: Latex coatings may be applied to damp surfaces, but not surfaces with droplets of water. Do not apply epoxies to damp surfaces as determined by ASTM D 4263. New plaster to be coated shall have a maximum instrument measured moisture content of 8 percent. In addition to moisture content requirements, allow new plaster to age a minimum of 30 days before preparation for painting.

3.6.3 Existing Asbestos Cement Surfaces

Remove oily stains by solvent cleaning with mineral spirts, CID A-A-2904. Remove loose dirt, dust, and other deleterious substances by brushing with a soft brush or rubbing with a dry cloth prior to application of the first coat material. Do not wire brush or clean using other abrasive methods. Surfaces shall be dry and clean prior to application of the coating.

3.7 PREPARATION OF WOOD AND PLYWOOD SURFACES

3.7.1 New [, Existing Uncoated,] [and] [Existing Coated] Surfaces

New [, Existing Uncoated,] [and] [Existing Coated] Plywood and Wood Surfaces, Except Floors, to Receive Natural Finish:

a. Surface Cleaning: Surfaces shall be free from dust and other deleterious substances and in a condition approved by the Contracting Officer prior to receiving paint or other finish. Do not use water to clean uncoated wood. [Scrape to remove loose coatings. Lightly sand to roughen the entire area of previously enamel-coated wood surfaces.]

[b. Removal of Fungus and Mold: Wash existing coated surfaces with a solution composed of 0.2 liter 3 ounces (2/3 cup) trisodium phosphate, 0.1 liter 1 ounce (1/3 cup) household detergent, 1.6 liters 1 quart 5 percent sodium hypochlorite solution and 4.8 liters 3 quarts of warm water. Rinse thoroughly with fresh water.]

c. Cosmetic Repair of Minor Defects:

(1) Knots and Resinous Wood [and Fire, Smoke, Water, and Color Marker Stained Existing Coated Surface]: Prior to application of coating, cover knots and stains with two or more coats of 1.3-kg-cut 3-pound-cut shellac varnish, plasticized with 0.14 liters 5 ounces of castor oil per liter gallon. Scrape away existing coatings from knotty areas, and sand before treating. Prime before applying any putty over shellacked area.

(2) Open Joints and Other Openings: Fill with whiting putty, CID A-A-378. Sand smooth after putty has dried.

(3) Checking: Where checking of the wood is present, sand the surface, wipe and apply a coat of pigmented orange shellac. Allow to dry before paint is applied.

d. Prime Coat For New Exterior Surfaces: Prime coat [wood doors,] [windows,] [frames,] [and] [trim] before wood becomes dirty, warped, [or weathered].

e. Cracks and Nailheads: Set and putty stop nailheads and putty cracks after the prime coat has dried.

3.7.2 Wood Floor Surfaces, Natural Finish

a. Initial Surface Cleaning: As specified in paragraph entitled "Surface Preparation."

b. [Existing Loose Boards and Shoe Molding: Before sanding, renail loose boards. Countersink nails and fill with an approved wood filler. Remove shoe molding before sanding and reinstall after completing other work. At Contractor's option, new shoe molding may be provided in lieu of reinstalling old. New wood molding shall be same size, wood species, and finish as the existing.]

c. Sanding and Scraping: Traverse floors a minimum of three times with power sander. A rotary disc sander may be used for the final cut, but make other cuts with a drum-type machine. Make first cut across grain or at 45-degree angle. Make succeeding cuts in direction of grain. Use No. 2 sandpaper for first traverse, No. 1/2 for second traverse, and No. 0 for the third. Use electric edger or hand sander for small areas near walls, in corners, and in small closets. Hand scrape small areas as necessary. Follow scraping by hand sanding in same direction as final cut.

d. Final Cleaning: After sanding, sweep and vacuum floors clean. Do not walk on floors thereafter until specified sealer has been applied and is dry.

3.7.3 Water Blasting of Existing Coated Wood Surfaces:

****
NOTE: Require water blasting for existing wood surfaces only for architectural restoration work where the cost is justified.
****

Water blasting shall be provided for the following surfaces: [_____].

a. Sample Panel: Prior to the initial surface cleaning, water blast a representative surface designated by the Contracting Officer. Final surface condition of remaining work shall be similar to sample panel approved by the Contracting Officer.

b. Initial Surface Cleaning: Water blasting shall consist of washing surfaces to receive paint with a high pressure spray, to remove loose paint, dirt, and other foreign or deleterious materials. The working pressure shall be between 2.8 and 4.8 MPa 400 and 700 pounds per square inch gage (psig) at a nozzle operating rate of a

minimum 75 liters per minute (l/min) 20 gallons per minute (g/min.). Do not flood vents or damage windows and floors. If the pressure specified will cause damage to existing wood, advise the Contracting Officer and obtain permission to vary the pressure. Direct the wash nozzle at the surface at an angle of approximately 75 degrees with the surface and at a distance not greater than 1500 mm 5 feet to apply water pressure required to remove loose paint, dirt, chalking, and other foreign matter.

c. Final Surface Cleaning: After allowing the surfaces to dry for a minimum of 24 hours, remove remaining dirt, splinters, loose particles, disintegrated and loose paint, grease, oil, and other foreign matter from the surface.

3.8 APPLICATION

3.8.1 Coating Application

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NOTE: Use the second bracket option when fire protection sprinkler systems including valve, piping, conduit, hangers and other miscellaneous items are to be painted.

****

Apply coating materials in accordance with SSPC PA 1. SSPC PA 1methods are applicable to all substrates, except as modified herein. Thoroughly work coating materials into joints, crevices, and open spaces. Touch up damaged coatings before applying subsequent coats. [Interior areas shall be broom clean and dust free before and during the application of coating material.] [Apply paint to new fire extinguishing sprinkler systems including valves, piping, conduit, hangers, supports, miscellaneous metal work, and accessories. Shield sprinkler heads with protective coverings while painting is in progress. Remove sprinkler heads which have been painted and replace with new sprinkler heads. For piping in unfinished spaces, provide primed surfaces with one coat of red alkyd gloss enamel to a minimum dry film thickness of 0.025 mm 1.0 mil. Unfinished spaces include attic spaces, spaces above suspended ceilings, crawl spaces, pipe chases, mechanical equipment room, and space where walls or ceiling are not painted or not constructed of a prefinished material. For piping in finished areas, provide prime surfaces with two coats of paint to match adjacent surfaces, except provide valves and operating accessories with one coat of red alkyd gloss enamel. Upon completion of painting, remove protective covering from sprinkler heads.]

a. Drying Time: Allow time between coats, as recommended by the coating manufacturer, to permit thorough drying, but not to present topcoat adhesion problems. Provide each coat in specified condition to receive next coat.

b. Primers, and Intermediate Coats: Do not allow primers or intermediate coats to dry more than 30 days, or longer than recommended by manufacturer, before applying subsequent coats. Follow manufacturer's recommendations for surface preparation if

primers or intermediate coats are allowed to dry longer than recommended by manufacturers of subsequent coatings. Each coat shall cover surface of preceding coat or surface completely, and there shall be a visually perceptible difference in shades of successive coats.

c. Finished Surfaces: Provide finished surfaces free from runs, drops, ridges, waves, laps, brush marks, and variations in colors.

d. Thermosetting Paints: Topcoats over thermosetting paints (epoxies and urethanes) should be applied while the intermediate coat is still tacky, within a few days. Otherwise, apply a mist-coat of 0.02 to 0.05 wet mm 1 to 2 wet mils of MIL-DTL-24441/29 and allow to cure to tack, a minimum of 4 hours, before topcoating.

e. Floors: [For nonslip surfacing on level floors, as the intermediate coat is applied, cover wet surface completely with almandite garnet, Grit No. 36, with maximum passing U.S. Standard Sieve No. 40 less than 0.5 percent. When the coating is dry, use a soft bristle broom to sweep up excess grit, which may be reused, and vacuum up remaining residue before application of the topcoat.] [For nonslip surfacing on ramps, provide MIL-C-24667, applied by roller in accordance with manufacturer's instructions.]

3.8.2 Equipment

Apply coatings with approved brushes, approved rollers, or approved spray equipment, unless specified otherwise. Spray areas made inaccessible to brushing by items such as ducts and other equipment.

3.8.3 Thinning of Paints

Reduce paints to proper consistency by adding fresh paint, except when thinning is mandatory for the type of paint being used. Obtain written permission from the Contracting Officer to use thinners. The written permission shall include quantities and types of thinners to use.

3.8.4 Coating Systems

a. Systems by Substrates: Apply coatings that conform to the respective specifications listed in the following Tables:

Table

1 Exterior Metal Surfaces
2 Interior Metal Surfaces
3 Building Systems Surfaces: Interior and Exterior
4 Exterior Concrete, Concrete Masonry, Stucco, and Asbestos-Cement Surfaces
5 Interior Concrete, Concrete Masonry, [Plaster] [and] [Wallboard] Surfaces
6 Exterior Wood [and Plywood] Surfaces
7 Interior Wood and Plywood Surfaces

b. Minimum Dry Film Thickness (DFT): Apply paints, primers, varnishes, enamels, undercoats, and other coatings to a minimum dry film thickness of 0.038 mm 1.5 mil each coat unless specified otherwise in the Tables. Coating thickness where specified, refers to the minimum dry film thickness. The DFT range specified for MIL-C-24667 represents minimum peak and valley measurements.

c. Coatings for Surfaces Not Specified Otherwise: Coat surfaces which have not been specified, the same as surfaces having similar conditions of exposure.

d. Existing Surfaces Damaged During Performance of the Work, Including New Patches In Existing Surfaces: Coat surfaces with the following:

(1) One coat of primer.

(2) One coat of undercoat or intermediate coat.

(3) One topcoat to match adjacent surfaces.

e. Existing Coated Surfaces To Be Painted: Apply coatings conforming to the respective specifications listed in the Tables herein, except that pretreatments, sealers and fillers need not be provided on surfaces where existing coatings are soundly adhered and in good condition. Do not omit undercoats or primers.

3.9 COATING SYSTEMS FOR METAL

a. Primer: Apply specified ferrous metal primer on the same day that surface is cleaned. If flash rusting occurs, re-clean the surface prior to application of primer.

(1) Inaccessible Surfaces: Prior to erection, use two coats of specified primer on metal surfaces that will be inaccessible after erection.

(2) Shop-primed Surfaces: Touch up exposed substrates and damaged coatings to protect from rusting prior to applying field primer.

(3) Surface Previously Coated with Epoxy or Urethane: Apply MIL-DTL-24441/1, Formula 150, 0.038 mm 1.5 mils DFT immediately prior to application of epoxy or urethane coatings.

(4) Pipes and Tubing: Semitransparent film applied to pipes and tubing at the mill is not to be considered a shop coat. Remove shop coat and apply specified ferrous metal primer prior to application of subsequent coats.

(5) Exposed Nails, Screws, Fasteners, and Miscellaneous Ferrous Surfaces. On surfaces to be coated with water thinned coatings, spot prime exposed nails and other ferrous metal with latex primer, CID A-A-50557.

b. Apply coatings of Tables 1, 2 and 3. "DFT" means dry film thickness in millimeters (mm) mils.

3.10 COATING SYSTEMS FOR CONCRETE AND CEMENTITIOUS SUBSTRATES

Apply coatings of Tables 4 and 5.

3.11 COATING SYSTEMS FOR WOOD AND PLYWOOD

a. Apply coatings of Tables 6 and 7.

b. Prior to erection, apply two coats of specified primer to treat and prime wood [and plywood] surfaces which will be inaccessible after erection.

c. Apply stains in accordance with manufacturer's printed instructions.

[d. Wood Floors to Receive Natural Finish: Thin first coat 2 to 1 using thinner recommended by coating manufacturer. Apply all coatings at rate of 30 square meters per 4 liters 300 to 350 square feet per gallon. Apply second coat not less than 2 hours and not over 24 hours after first coat has been applied. Apply with lambs wool applicators or roller as recommended by coating manufacturer. Buff or lightly sand between intermediate coats as recommended by coating manufacturer's printed instructions.]

3.12 PIPING IDENTIFICATION

Piping Identification, Including Surfaces In Concealed Spaces: Provide in accordance with MIL-STD-101. Place stenciling in clearly visible locations. On piping not covered by MIL-STD-101, stencil approved names or code letters, in letters a minimum of 13 mm 1/2 inch high for piping and a minimum of 50 mm 2 inches high elsewhere. Stencil arrow-shaped markings on piping to indicate direction of flow. Use black stencil paint, CID A-A-1558.

3.13 INSPECTION AND ACCEPTANCE

In addition to meeting previously specified requirements, demonstrate mobility of moving components, including swinging and sliding doors, cabinets, and windows with operable sash, for inspection by the Contracting Officer. Perform this demonstration after appropriate curing and drying times of coatings have elapsed and prior to invoicing for final payment.

****

NOTE: Use the following guide for assistance in selecting coatings with respect to substrates and interior or exterior exposures. Use listing in PART ONE for volatile organic content (VOC) levels. If VOC or paint coating is not listed, verify VOC level of desired coating with manufacturer's catalog data.

GUIDE TO SELECTING PAINTS

(Alternate MPI paint systems to Federal/Military/CID Spec paints will be listed as equivalent cross-over matches within the Paint Tables where possible.

COATING	USE	SUBSTRATE	EXPOSURE
	P-INT-TOP	St-GalSt-NonF-Con-Mas-Plas-Gyp-Wd	Int - Ext
ALKYDS - ARCHITECTURAL			
CID A-A-50574	TOP	St Plas-Gyp-Wd	Int
CID A-A-2994	INT	St Con	Int
CID A-A-2336	P	Wd	Ext
LATEX - ARCHITECTURAL			
TT-P-19	P-INT-TOP	Con-Mas-Plas	Ext
TT-P-29	P-INT	GalSt Con-Mas-Plas-Gyp-Wd	Int
CID A-A-2246	TOP	St Plas-Gyp-Wd	Int
CID A-A-2336	P	Wd	Ext
ALKYDS - INDUSTRIAL			
CID A-A-3067	INT	St NonF-Con-Mas-Plas	Ext
TT-E-487	P-INT-TOP	Con Wd	Int & Ext
TT-P-664	P	St	Int & Ext
SPC-P-2	P	St	Int & Ext
SPC-P-25	P	St	Ext
LATEX - INDUSTRIAL			
\AA-50557	P	GalSt-NonF	Int & Ext
CID A-A-50570	INT-TOP	GalSt-NonF	Int & Ext
TT-E-2784	INT-TOP	GalSt-NonF-Con-Mas Wd	Ext
2 - COMPONENT EPOXIES			
SPC-P-20 (*)	P	St	Ext
TT-C-535 (#)	P-INT-TOP	St-GlaSt Con-Mas Gyp-Wd	Int
SPC-P-22	P	St-GalSt-NonF	Ext
D-P-24441	P-INT-TOP	St-GalSt-NonF-Con	Ext
2 - COMPONENT URETHANES			
MIL-PRF-85285	TOP	St-GalSt	Ext
1 - COMPONENT URETHANES			
TT-C-542 (*)	P-INT-TOP	Wd	Int

*** Note: Verify that the primer is Type I, zinc rich.**

 # Note: Specify Type I or Type II for clear or pigmented coating as desired.

*** Note: Specify Type I or Type II for aliphatic or aromatic coating and Class A or Class B for clear or pigmented finish.**

GUIDE TO SELECTING PAINTS

(Alternate MPI paint systems to Federal/Military/CID Spec paints will be listed as equivalent cross-over matches within the Paint Tables where possible.

COATING	USE	SUBSTRATE	EXPOSURE
	P-INT-TOP	St-GalSt-NonF-Con-Mas-Plas-Gyp-Wd	Int - Ext
STAINS			
TT-S-708	P TOP	Wd	Ext
TT-S-711	P TOP	Wd	Int
VARNISHES			
CID A-A-1800	P-INT-TOP	Wd	Int
SPECIAL			
AA-1500	P	Mas	Int
AA-1558	STENCIL		
TT-C-555	TOP	Con-Mas	Int & Ext
TT-P-28	P TOP	St	Ext
CID A-A-2335	P-INT-TOP	Wd	Int
M-C-24667	P-INT-TOP	St NonF Wd	Int & Ext

****

NOTE: (Table 1, Item C). Use MIL-PRF-85285 in severe environments with durable glossy appearance. Use latex systems where MIL-P-24441 is not allowed. MIL-PRF-85285, urethane, and MIL-P-24441, Types II and IV epoxies are allowed in California. For selection of top coats, use the first bracket option for geographic areas that do not have harsh environmental conditions. Use the second bracket option for areas that have harsh corrosive environments.

(Item E). Use CID A-A-50557 and CID A-A-50570 over existing alkyd or latex paints and MIL-DTL-24441/1 over existing epoxy systems.

(Item F). In the first bracket option, select appropriate top coat. Use first top coat option for geographic areas that do not have harsh environmental conditions. Use the second top coat option for areas that have harsh, corrosive environments.

****

NOTE: Federal and Military specification paint cross matches for MPI (Master Paint Institute) paints and surface tone characteristics shall be as follows:

CID A-A-1500 Sealer, Surface (Latex Block Filler)
(cross match)
MPI 4
CID A-A-1800 Varnish, Oil: Spar
(cross match)
MPI 28
CID A-A-2246 High Performance Latex
(Cross match)
MPI 138 flat
MPI 139 eggshell
MPI 141 semigloss
MPI 114 gloss
CID A-A-2335 Sealer, Surface (Varnish Type, Wood and Cork Floors)
(cross match)
MPI 91 (top coated w/MPI 56, 57, 73, 74, or 75 only)
CID A-A-2336 Primer Coating,(Oil-Alkyd, Exterior Wood, White and Tints)
(cross match)
MPI 7 (for new work)
MPI 5 (for existing work)
CID A-A-2962 Alkyd Enamel, Class A, Grade B (semigloss) cross match is
MPI 47 (semigloss);
Class A, Grade C (gloss) cross match is
MPI 48 (gloss).
Other gloss levels include,
MPI 49 (flat) and MPI 51 (eggshell)
CID A-A-2994 Primer Coating, Interior, for Walls and Wood
(cross match)
MPI 50
CID A-A-3054 Paint, Heat Resisting (400 F)
(cross match)
MPI 2
CID A-A-3067 Paint, Alkyd, Exterior, Low VOC
(cross-match)
MPI 94 semigloss
MPI 9 gloss
CID A-A-50557 Primer, Water-Borne, Acrylic/Modified Acrylic (for galvanized, cross match)
MPI 134
CID A-A-50570 Water-Borne, Acrylic/Modified Acrylic
(cross match)
MPI 110 [1-gloss][2-semigloss][3-eggshell]
CID A-A50574 Enamel, Odorless, Alkyd, Interior, Semigloss, White and Tints
(cross match)
MPI 47 semigloss
TT-P-19 Latex, Acrylic Emulsion (cross match)
MPI 10 flat
TT-P-28 Paint, Aluminum, Heat Resisting (1200 F)
(cross match)

MPI 22 (1100 F)
TT-P-29 Latex Base
(cross match)
MPI 53 flat
MPI 52 eggshell
MPI 54 semigloss
MPI 114 gloss
TT-C-542 Coating, Polyurethane, Oil-Free, Moisture Curing
(cross match)
MPI 31
TT-E-2784 Enamel (Acrylic Emulsion, Exterior)
(cross match)
Type II, semi-gloss; MPI 11 semi-gloss
Type I, gloss; MPI 119 gloss
, eggshell; MPI 52 eggshell
TT-P-664 Primer Coating, Alkyd, Corrosion-Inhibiting, Lead and Chromate Free, VOC-Compliant
(cross match)
MPI 79
TT-S-708 Stain, Oil: Semi-Transparent, Wood, Exterior
(cross match)
MPI 13 semi-transparent
TT-S-711 Stain, oil: Semi-Transparent, Wood, Exterior
(cross match)
MPI 90
****

****
NOTE: Gloss levels of FS TT-E-2784 and CID A-A-2962: When specifying FS TT-E-2784 and corresponding MPI 11 and MPI 119 or CID A-A-2962, Class A, Grades B, C, or equivalent eggshell, the acceptable gloss level equivalents are as follows:

FS TT-E-2784, Type II(semigloss); MPI 11(semigloss)
FS TT-E-2784, Type I(gloss); MPI 119(gloss)
FS TT-E-2784, Note **(eggshell); MPI 52(eggshell)
CID A-A-2246, Type I, Class 1(flat); MPI 138(flat)
CID A-A-2246, Type I, Class 2(eggshell); MPI 139 (eggshell)
CID A-A-2246, Type I, Class 3(semigloss); MPI 141 (semigloss)
CID A-A-2962, Grade B(semigloss); MPI 47(semigloss)
CID A-A-2962, Grade C(gloss); MPI 48(gloss)
CID A-A-2962, Note **(eggshell); MPI 51(eggshell)

NOTE **: Eggshell shall conform to a gloss at 60 degrees between 10 and 25 units in accordance with ASTM D 523.
****

TABLE 1

EXTERIOR METAL SURFACES

A. New Steel has been blast-cleaned (up to SSPC SP 6):

[Primer:	FS TT-P-664	0.0375 mm DFT
Intermediate:	CID A-A-3067 [semigloss][gloss]	0.0375 mm DFT
Topcoat:	CID A-A-3067 [semigloss][gloss]	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 79	0.0375 mm DFT
Intermediate:	MPI 94 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 94 (semigloss)	0.0375 mm DFT]
[Primer:	MPI 79	0.0375 mm DFT
Intermediate:	MPI 9 (gloss)	0.0375 mm DFT
Topcoat:	MPI 9 (gloss)	0.0375 mm DFT]]

B. Existing steel that has been spot-blasted (up to SSPC SP 6):

1. [Surface previously coated with alkyd or latex:

Spot Primer:	MPI 101	0.0375 mm DFT
Intermediate:	MPI 110 [1 (gloss)][2 (semigloss)]	0.0375 mm DFT
Topcoat:	MPI 110 [1 (gloss)][2 (semigloss)]	0.0375 mm DFT]

2. [Surface previously coated with epoxy:

Spot Primer:	MIL-DTL-24441 /29 Formula 150 Type IV	0.075 mm DFT
Intermediate:	N/A	
Topcoat:	[[CID A-A-50570 (semigloss)	0.0375 mm DFT]
	[MIL-PRF-85285 (gloss)	0.0375 mm DFT]]

C. New [and existing] steel blasted to SSPC SP 10:

1.

Primer:	MIL-DTL-24441 /29 Formula 150 Type IV	0.075 mm DFT
Intermediate:	MIL-DTL-24441 /31 Formula 152 Type IV	0.075 mm DFT
Topcoat:	[[CID A-A-50570 (semigloss)	0.0375 mm DFT]
	[MIL-PRF-85285 (gloss)	0.050 mm DFT]]

EXTERIOR METAL SURFACES (GALVANIZED)

D. New galvanized surfaces:

1.

[Primer:	FS TT-P-19 (flat)	0.0375 mm DFT
Intermediate:	N/A	
Topcoat:	FS TT-P-19 (flat)	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	MPI 10 (flat)	0.0375 mm DFT

TABLE 1

EXTERIOR METAL SURFACES

Intermediate:	N/A	
Topcoat:	MPI 10 (flat)	0.0375 mm DFT]
2. [Primer:	FS TT-P-19 (flat)	0.0375 mm DFT
Intermediate:	N/A	
Topcoat:	FS TT-E-2784 [(semigloss)][(gloss)]	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 10 (flat)	0.0375 mm DFT
Intermediate:	N/A	
Topcoat:	MPI 11 (semigloss)	0.0375 mm DFT]
[Primer:	MPI 10 (flat)	0.0375 mm DFT
Intermediate:	N/A	
Topcoat:	MPI 119 (gloss)	0.0375 mm DFT]]
3. [Primer:	CID A-A-50557	0.0375 mm DFT
Intermediate:	N/A	
Topcoat:	CID A-A-50570 (semigloss)	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	MPI 134	0.0375 mm DFT
Intermediate:	N/A	
Topcoat:	MPI 110 [2 (semigloss)][1 (gloss)]	0.0375 mm DFT]
4. [Primer:	MIL-DTL-24441/29 Formula 150 Type IV	0.050 mm DFT
Intermediate:	N/A	
Topcoat:	[[CID A-A-50570 (semigloss)	0.0375 mm DFT]
	[MIL-PRF-85285 (gloss)	0.0375 mm DFT]]

EQUIVALENT CROSS-OVER MATCH

Primer:	SSPC Paint 22	0.050 mm DFT
Intermediate:	N/A	
Topcoat:	SSPC Paint 104 (gloss)	0.025 mm DFT]

E. Galvanized surfaces with slight coating deterioration; little or no rusting:

1. [Spot Prime:	CID A-A-50557	0.0750 mm DFT
Intermediate:	N/A	
Topcoat:	CID A-A-50570 (semigloss)	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	MPI 134	0.0375 mm DFT
Intermediate:	N/A	

TABLE 1

EXTERIOR METAL SURFACES

Topcoat:	MPI 110 2 (semigloss)	0.0375 mm DFT]
2. [Spot Prime:	MIL-DTL-24441 /29 Formula 150 Type IV	0.0750 mm DFT
Intermediate:	N/A	
Topcoat:	MIL-PRF-85285 (gloss)	0.050 mm DFT]

F. Galvanized surfaces with severely deteriorated coating or rusting:

1. [Primer:	MIL-DTL-24441 /29 Formula 150 Type IV	0.0750 mm DFT
Intermediate:	MIL-DTL-24441 /31 Formula 152 Type IV	0.0750 mm DFT
Topcoat:	[CID A-A-50570 (semigloss)	0.0375 mm DFT]
	[MIL-PRF-85285 (gloss)	0.050 mm DFT]]
2. [Primer:	MPI 101	0.0625 mm DFT
Intermediate:	MPI 98	0.0625 mm DFT
Topcoat:	MPI 110 [2 (semigloss)][1 (gloss)]	0.050 mm DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	SSPC Paint 22	0.0625 mm DFT
Intermediate:	SSPC Paint 22	0.0625 mm DFT
Topcoat:	SSPC Paint 24 (semigloss)	0.050 mm DFT]

OTHER EXTERIOR METAL SURFACES

G. [Terne-coated and other] Metal, except roof surfaces, not otherwise specified:

1. [Primer:	FS TT-P-664	0.050 mm DFT
Intermediate:	CID A-A-3067 [(semigloss)][(gloss)]	0.0375 mm DFT
Topcoat:	CID A-A-3067 [(semigloss)][(gloss)]	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 79	0.0375 mm DFT
Intermediate:	MPI 94 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 94 (semigloss)	0.0375 mm DFT]
[Primer:	MPI 79	0.0375 mm DFT
Intermediate:	MPI 9 (gloss)	0.0375 mm DFT
Topcoat:	MPI 9 (gloss)	0.0375 mm DFT]]
2. [Primer:	FS TT-E-664	0.0375 mm DFT
Intermediate:	CID A-A-50570 (semigloss)	0.0375 mm DFT
Topcoat:	CID A-A-50570 (semigloss)	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	MPI 79	0.0375 mm DFT
Intermediate:	MPI 110 [2 (semigloss)][1 (gloss)]	0.0375 mm DFT

TABLE 1

EXTERIOR METAL SURFACES

Topcoat:	MPI 110	[2 (semigloss)][1 (gloss)]	0.0375 mm DFT]

H. Existing roof surfaces previously coated:

1. [ASTM D 2824: Sufficient coats to provide not less than 0.20 mm of finished coating system.]

2. [

Primer:	FS TT-P-38	0.0375 mm DFT
Intermediate:	N/A	
Topcoat:	FS TT-P-38	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	MPI 1	0.0375 mm DFT
Intermediate:	N/A	
Topcoat:	MPI 1	0.0375 mm DFT]

****

NOTE: (For Table 2). Use latex gloss or semigloss paint for occupied buildings and areas where strong odors would be objectionable. Where allowable, consider use of eggshell or semigloss enamel in lieu of flat paint for areas subject to soiling where gloss is not desired.

(Item A). Generally, for existing surfaces which have alkyd enamel coating, do not specify latex paint which does not bond well to enamel. Also avoid applying latex paint over alkyd primers.

(Items B and C). For new or existing uncoated surfaces requiring non-slip coating, specify MIL-C-24667. For rusted surfaces, modify surface preparation to include near white blast cleaning in accordance with SSPC SP 10 prior to coating application.

(Item D). List other high humidity areas requiring enamel finishes. For tile-like finishes, filler materials, and applications refer to Section 09963, "High-Build Glaze Coating." These high performance coatings are normally used to meet exposure-resistant requirements and can be applied to wood, metal, and concrete substrates.

When an alkyd enamel finish is desired, select the alkyd, enamel intermediate and top coating with the type gloss finish desired.

****

TABLE 2

INTERIOR METAL SURFACES

A. Metal (except floors) not otherwise specified:

1. [Primer
   - (non-shop-primed surfaces): FS TT-P-664 0.050 mm DFT
   Intermediate: CID A-A-2962 [flat][Note **][semigloss][gloss] 0.0375 mm DFT
   Topcoat: CID A-A-2962 [flat][Note **][semigloss][gloss] 0.0375 mm DFT

[NOTE **: Eggshell shall conform to a gloss at 60 degrees between 10 and 25 units in accordance with ASTM D 523.]

EQUIVALENT CROSS-OVER MATCH

[Primer - (non-shop-primed surfaces):	MPI 79	0.050 mm DFT
Intermediate:	MPI 49 (flat)	0.0375 mm DFT
Topcoat:	MPI 49 (flat)	0.0375 mm DFT]
[Primer - (non-shop-primed surfaces):	MPI 79	0.050 mm DFT
Intermediate:	MPI 51 (eggshell)	0.0375 mm DFT
Topcoat:	MPI 51 (eggshell)	0.0375 mm DFT]
[Primer - (non-shop-primed surfaces):	MPI 79	0.050 mm DFT
Intermediate:	MPI 47 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 47 (semigloss)	0.0375 mm DFT]
[Primer - (non-shop-primed surfaces):	MPI 79	0.050 mm DFT
Intermediate:	MPI 48 (gloss)	0.0375 mm DFT
Topcoat:	MPI 48 (gloss)	0.0375 mm DFT]]

2. [Primer
   (non-shop-primed surfaces): FS TT-P-664 0.050 mm DFT
   Intermediate: CID A-A-2246, [flat][eggshell][semigloss] 0.0375 mm DFT
   Topcoat: CID A-A-2246, [flat][eggshell][semigloss] 0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 79		0.0625 mm DFT
Intermediate:	MPI 138	(flat)	0.0375 mm DFT
Topcoat:	MPI 138	(flat)	0.0375 mm DFT]
[Primer:	MPI 79		0.0625 mm DFT
Intermediate:	MPI 139	(eggshell)	0.0375 mm DFT
Topcoat:	MPI 139	(eggshell)	0.0375 mm DFT]

TABLE 2

INTERIOR METAL SURFACES

[Primer:	MPI 79		0.0625 mm DFT
Intermediate:	MPI 141	(semigloss)	0.0375 mm DFT
Topcoat:	MPI 141	(semigloss)	0.0375 mm DFT]]

B. Metal floors (non-shop-primed surfaces):

1. Primer:	FS TT-P-664		0.050 mm DFT
Intermediate:	MIL-C-24667	(non-skid)	0.125-0.25 mm DFT
Topcoat:	MIL-C-24667	(non-skid)	0.125-0.25 mm DFT

C. Metal floors (non-slip deck surfaces):

1. Primer:	MIL-DTL-24441/29 Formula 150 Type IV		0.0750 mm DFT
Intermediate:	MIL-C-24667	(non-skid)	0.125-0.25 mm DFT
Topcoat:	MIL-C-24667	(non-skid)	0.125-0.25 mm DFT

D. Metal in toilets [and other high-humidity areas]:

1. [Primer - (non-shop-primed surfaces):	FS TT-P-664	0.050 mm DFT
Intermediate:	CID A-A-2962 [flat][Note **][semigloss][gloss]	0.0375 mm DFT
Topcoat:	CID A-A-2962 [flat][Note **][semigloss][gloss]	0.0375 mm DFT

[NOTE **: Eggshell shall conform to a gloss at 60 degrees between 10 and 25 units in accordance with ASTM D 523.]

EQUIVALENT CROSS-OVER MATCH

[[Primer - (non-shop-primed surfaces):	MPI 79	0.050 mm DFT
Intermediate:	MPI 49 (flat)	0.0375 mm DFT
Topcoat:	MPI 49 (flat)	0.0375 mm DFT]
[Primer - (non-shop-primed surfaces):	MPI 79	0.050 mm DFT
Intermediate:	MPI 51 (eggshell)	0.0375 mm DFT
Topcoat:	MPI 51 (eggshell)	0.0375 mm DFT]
[Primer - (non-shop-primed surfaces):	MPI 79	0.050 mm DFT
Intermediate:	MPI 47 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 47 (semigloss)	0.0375 mm DFT]
[Primer - (non-shop-primed surfaces):	MPI 79	0.050 mm DFT
Intermediate:	MPI 48 (gloss)	0.0375 mm DFT
Topcoat:	MPI 48 (gloss)	0.0375 mm DFT]]

TABLE 2

INTERIOR METAL SURFACES

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(Item D.2) Heat Resistant Silicone Based Paints: In accordance with Steel Structures Painting Council (SSPC) "Systems and Specifications", Volume 2, the choice of paints for specific applications will depend on the operational conditions and the service desired. The application temperature should be between 10 to 49 degrees C and the cure required will vary from room temperature with unspecified time to an elevated temperature and/or curing time. Curing requirements should be determined before specifying so that the suppler will be aware of requirements. The dry film thickness of silicone-modified organic coatings with an operating temperatures between 121 to 316 degrees C should be between 102 to 152 microns. For Silicone ceramic Silicone-modified organic operating between 216 to 649 degrees C, dry film thickness should be between 25 to 102 microns. Provide the appropriate type within brackets.

****

TABLE 3

BUILDING SYSTEMS SURFACES: INTERIOR AND EXTERIOR

Mechanical, electrical, [Fire extinguishing sprinkler systems including valves, conduit, hangers, supports,] [exposed copper piping,] and miscellaneous metal items, except hot metal surfaces and new prefinished equipment.

A. Surfaces not adjacent to painted surfaces:

1. [Primer:	FS TT-P-664		0.0500 mm DFT
Intermediate:	CID A-A-2962 [(semigloss)][(gloss)]		0.0375 mm DFT
Topcoat:	CID A-A-2962 [(semigloss)][(gloss)]		0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 79		0.0375 mm DFT
Intermediate:	MPI 47	(semigloss)	0.0375 mm DFT
Topcoat:	MPI 47	(semigloss)	0.0375 mm DFT]
[Primer:	MPI 79		0.0375 mm DFT
Intermediate:	MPI 48	(gloss)	0.0375 mm DFT
Topcoat:	MPI 48	(gloss)	0.0375 mm DFT]]
2. [Primer:	TT-P-664		0.0375 mm DFT
Intermediate:	CID A-A-50570 (semigloss)		0.0375 mm DFT

TABLE 3

BUILDING SYSTEMS SURFACES: INTERIOR AND EXTERIOR

Topcoat:	CID A-A-50570 (semigloss)	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	MPI 79	0.0375 DFT
Intermediate:	MPI 110 [1 (gloss)][2 (semigloss)]	0.0375 mm DFT
Topcoat:	MPI 110 [1 (gloss)][2 (semigloss)]	0.0375 mm DFT]

B. Surfaces adjacent to painted surfaces: Coating systems as specified. Color of topcoat to match adjacent surfaces: 0.0375 mm DFT for each coat.

C. New [fire extinguishing sprinkler systems,] exposed piping [and equipment]:

1. [Primer: FS TT-P-664 0.0375 mm DFT
   Intermediate: CID A-A-2962 [(semigloss)][(gloss)] 0.0375 mm DFT
   Topcoat: CID A-A-2962 [(semigloss)][(gloss)] 0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 79	0.0375 mm DFT
Intermediate:	MPI 47 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 47 (semigloss)	0.0375 mm DFT]

[Primer:	MPI 79	0.0375 mm DFT
Intermediate:	MPI 48 (gloss)	0.0375 mm DFT
Topcoat:	MPI 48 (gloss)	0.0375 mm DFT]]

2. [Primer: MIL-DTL-24441 /29 Formula 150, Type IV 0.0750 mm DFT
   Intermediate: N/A
   Topcoat: MIL-DTL-24441 /31 Formula 152, Type IV 0.0750 mm DFT]

3. [Primer: MIL-DTL-24441 /29 Formula 150, Type IV 0.0750 mm DFT
   Intermediate: N/A
   Topcoat: MIL-PRF-85285 (gloss) 0.050 mm DFT]

D. Hot metal surfaces [including smokestacks] subject to temperatures up to 204 degrees C:

1. [Primer: N/A
   Intermediate: CID A-A-3054 0.0375 mm DFT
   Topcoat: CID A-A-3054 0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	N/A	
Intermediate:	MPI 2	0.0375 mm DFT
Topcoat:	MPI 2	0.0375 mm DFT]

2. [Primer: N/A
   Intermediate: SSPC Paint 20 Type I-[_____] 0.0___ mm DFT

TABLE 3

BUILDING SYSTEMS SURFACES: INTERIOR AND EXTERIOR

Topcoat:	SSPC Paint 20 Type I-[_____]	0.0___ mm DFT]

E. [New surfaces and] [Existing surfaces made bare cleaning SSPC SP 10 subject to temperatures up to 593 degrees C:

1. [

Primer:	N/A	
Intermediate:	FS TT-P-28	0.0375 mm DFT
Topcoat:	FS TT-P-28	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	N/A	
Intermediate:	MPI 22	0.0375 mm DFT
Topcoat:	MPI 22	0.0375 mm DFT]

F. Insulation and surfaces of insulation coverings:

1. [

Primer:	N/A	
Intermediate:	FS TT-P-19 (flat)	0.0375 mm DFT
Topcoat:	FS TT-P-19 (flat)	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	N/A	
Intermediate:	MPI 10 (flat)	0.0375 mm DFT
Topcoat:	MPI 10 (flat)	0.0375 mm DFT]

2. [

Primer:	N/A	
Intermediate:	FS TT-E-2784 [(semigloss)][(gloss)]	0.0375 mm DFT
Topcoat:	FS TT-E-2784 [(semigloss)][(gloss)]	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

[

Primer:	N/A	
Intermediate:	MPI 11 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 11 (semigloss)	0.0375 mm DFT]

[

Primer:	N/A	
Intermediate:	MPI 119 (gloss)	0.0375 mm DFT
Topcoat:	MPI 119 (gloss)	0.0375 mm DFT]]

G. Cloth and paper covering on insulation:

Primer: Glue size and primer recommended by material manufacturer, one coat each.

Intermediate: N/A

Topcoat: Coating to match adjacent surfaces.

****

NOTE: (Table 4). For applications of high-build glaze finishes over concrete masonry units requiring block filler that meets resistance to wind-driven rain or resistance to hydrostatic pressure, specify filler materials and applications of Section 09963, "High-Build Glaze Coating."

(Items B and C). Except for new cast-in-place concrete walls in Iceland, use FS TT-P-19. Use FS TT-C-555, for accent panels, special effect, or ceilings.

Fill Coat: Normally new concrete and stucco are sufficiently dense, therefore do not need a fill coat. Concrete masonry and existing concrete that have weathered and become open and porous do need a fill coat.

Color: Main reason for painting concrete and stucco is to obtain desired color. Before specifying paint systems, coordinate with other specification sections to confirm that concrete does not have special waterproof finish or applied, colored cementitious finish and that stucco does not have color pigment integral with mix.

Do not use FS TT-P-19 on new cast-in-place concrete wall surfaces in Iceland. Specify "steinakryl" which is a solvent-borne acrylic paint applied to vertical or near vertical cast-in-place concrete walls. The wall top should be protected by cap or by combination of clear penetrating waterproofing solution and "steinakryl" called, "Steinvari 2000." These products are acceptable and available to the Iceland Prime Contractor.

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TABLE 4

EXTERIOR CONCRETE, CONCRETE MASONRY, STUCCO, AND ASBESTOS-CEMENT SURFACES

A. New [and existing] concrete; including soffits but excluding tops of slabs:

1. [Primer: As recommended by manufacturer of FS TT-P-19
Intermediate: FS TT-P-19 (flat) 0.0375 mm DFT
Topcoat: FS TT-P-19 (flat) 0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

Primer: As recommended by manufacturer of MPI 10
Intermediate: MPI 10 (flat) 0.0375 mm DFT

TABLE 4

EXTERIOR CONCRETE, CONCRETE MASONRY, STUCCO, AND ASBESTOS-CEMENT SURFACES

Topcoat:	MPI 10 (flat)	0.0375 mm DFT]

2. [Primer: As recommended by manufacturer of FS TT-E-2784

Intermediate:	FS TT-E-2784 [(semigloss)][(gloss)]	0.0375 mm DFT
Topcoat:	FS TT-E-2784 [(semigloss)][(gloss)]	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	As recommended by manufacturer of MPI 11	
Intermediate:	MPI 11 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 11 (semigloss)	0.0375 mm DFT]
[Primer:	N/A	
Intermediate:	MPI 119 (gloss)	0.0375 mm DFT
Topcoat:	MPI 119 (gloss)	0.0375 mm DFT]]

3. [Primer: As recommended by manufacturer of FS TT-C-555

Intermediate:	FS TT-C-555, Type II (see note)
Topcoat:	FS TT-C-555, Type II (see note)

NOTE: Sufficient coats to provide no less than 0.50 mm of finished coating system. Texture: [sand] [coarse]]

4. [Primer: As recommended by manufacturer of MPI 113

Intermediate:	MPI 113 (see note)
Topcoat:	MPI 113 (see note)

NOTE: Sufficient coats to provide no less than 0.40 to 0.45 mm of finished coating system. Texture: smooth]

B. New [and existing] concrete masonry on uncoated surface:

1. [Primer: CID A-A-1500 [on existing surface imperfections]

Intermediate:	FS TT-P-19 (flat)	0.0375 mm DFT
Topcoat:	FS TT-P-19 (flat)	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	MPI 4 [on existing surface imperfections]	0.0375 mm DFT
Intermediate:	MPI 10 (flat)	0.0375 mm DFT
Topcoat:	MPI 10 (flat)	0.0375 mm DFT]

2. [Primer: CID A-A-1500 [on existing surface imperfections]

Intermediate:	FS TT-P-19 (flat)	0.0375 mm DFT
Topcoat:	FS TT-E-2784 [(semigloss)][(gloss)]	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 4 [on existing surface imperfections]	0.0375 mm DFT
Intermediate:	MPI 11 (semigloss)	0.0375 mm DFT

TABLE 4

EXTERIOR CONCRETE, CONCRETE MASONRY, STUCCO, AND ASBESTOS-CEMENT SURFACES

Topcoat:	MPI 11	(semigloss)	0.0375 mm DFT]
[Primer:	MPI 4	[on existing surface imperfections]	0.0375 mm DFT
Intermediate:	MPI 119	(gloss)	0.0375 mm DFT
Topcoat:	MPI 119	(gloss)	0.0375 mm DFT]]

3. [Primer: As recommended by manufacturer of FS TT-C-555
   Intermediate: FS TT-C-555, Type II (see note)
   Topcoat: FS TT-C-555, Type II (see note)

   NOTE: Sufficient coats to provide no less than 0.50 mm of finished coating system. Texture: [sand] [coarse]]

4. [Primer: As recommended by manufacturer of MPI 113
   Intermediate: MPI 113 (see note)
   Topcoat: MPI 113 (see note)

   NOTE: Sufficient coats to provide no less than 0.40 to 0.45 mm of finished coating system. Texture: smooth]

C. New [and existing] stucco:

1. [Primer: FS TT-P-19 New work or spot prime existing 0.0375 mm DFT
   Intermediate: FS TT-P-19 (flat) 0.0375 mm DFT
   Topcoat: FS TT-P-19 (flat) 0.0375 mm DFT

   EQUIVALENT CROSS-OVER MATCH

   Primer: MPI 10 New work or spot prime existing 0.0375 mm DFT
   Intermediate: MPI 10 (flat) 0.0375 mm DFT
   Topcoat: MPI 10 (flat) 0.0375 mm DFT]

2. [Primer: FS TT-P-19 New work or spot prime existing 0.0375 mm DFT
   Intermediate: FS TT-E-2784 [(semigloss)][(gloss)] 0.0375 mm DFT
   Topcoat: FS TT-E-2784 [(semigloss)][(gloss)] 0.0375 mm DFT

   EQUIVALENT CROSS-OVER MATCH

   [Primer: MPI 11 New work or spot prime existing 0.0375 mm DFT
   Intermediate: MPI 11 (semigloss) 0.0375 mm DFT
   Topcoat: MPI 11 (semigloss) 0.0375 mm DFT]

   [Primer: MPI 119 New work or spot prime existing 0.0375 mm DFT
   Intermediate: MPI 119 (gloss) 0.0375 mm DFT
   Topcoat: MPI 119 (gloss) 0.0375 mm DFT]]

3. [Primer: As recommended by manufacturer of FS TT-C-555
   Intermediate: FS TT-C-555, Type II (see note)
   Topcoat: FS TT-C-555, Type II (see note)

TABLE 4

EXTERIOR CONCRETE, CONCRETE MASONRY, STUCCO, AND ASBESTOS-CEMENT SURFACES

NOTE: Sufficient coats to provide no less than 0.50 mm of finished coating system. Texture: [sand] [coarse]]

4. [Primer: As recommended by manufacturer of MPI 113
   Intermediate: MPI 113 (see note)
   Topcoat: MPI 113 (see note)

   NOTE: Sufficient coats to provide no less than 0.40 to 0.45 mm of finished coating system. Texture: Smooth]

D. Asbestos cement:

1. [Primer: FS TT-P-19 New work or spot prime existing 0.0375 mm DFT
   Intermediate: FS TT-P-19 (flat) 0.0375 mm DFT
   Topcoat: FS TT-P-19 (flat) 0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

   Primer: MPI 10 New work or spot prime existing 0.0375 mm DFT
   Intermediate: MPI 10 (flat) 0.0375 mm DFT
   Topcoat: MPI 10 (flat) 0.0375 mm DFT]

2. [Primer: FS TT-P-19 New work or spot prime existing 0.0375 mm DFT
   Intermediate: FS TT-E-2784 [(semigloss)][(gloss)] 0.0375 mm DFT
   Topcoat: FS TT-E-2784 [(semigloss)][(gloss)] 0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

   [Primer: MPI 11 New work or spot prime existing 0.0375 mm DFT
   Intermediate: MPI 11 (semigloss) 0.0375 mm DFT
   Topcoat: MPI 11 (semigloss) 0.0375 mm DFT]

   [Primer: MPI 119 New work or spot prime existing 0.0375 mm DFT
   Intermediate: MPI 119 (gloss) 0.0375 mm DFT
   Topcoat: MPI 119 (gloss) 0.0375 mm DFT]]

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NOTE: (Table 5). Use latex gloss or semigloss paint for occupied buildings and where strong odors would be objectional. Where allowable, consider eggshell or semigloss enamel in lieu of flat paint for areas subject to soiling where gloss is not desired.

For existing surfaces with alkyd enamel coating, do not specify latex paint which does not bond well to enamel. Avoid applying latex paint over alkyd primers.

(Item B). For hiding imperfections in new concrete ceilings. Do not specify in wet or humid areas or for previously painted surfaces.

(Item C). List other high humidity areas requiring enamel finishes. For tile-like finishes, filler materials, and applications refer to Section 09963, "High-Build Glaze Coating." These high performance coatings are normally used to meet exposure-resistant requirements and can be applied to wood, metal, and concrete substrates.

Specify rubber paint, CID A-A-3120, Type C, on new or uncoated existing surfaces or existing surfaces previously coated with rubber paint.

Use (low lustre) eggshell latex, CID A-A-2246, in lieu of FS TT-P-19 if more soil resistant finish is desired than flat latex.

Use CID A-A-1500 filler if smooth surface is required on CMU surfaces.

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TABLE 5

INTERIOR CONCRETE, CONCRETE MASONRY, [PLASTER][AND][WALLBOARD] SURFACES

A. Concrete not specified otherwise, except floors [and ceilings]:

1. [Primer: CID A-A-2994, Type II 0.0375 mm DFT
   Intermediate: FS TT-P-29 (flat) 0.0375 mm DFT
   Topcoat: FS TT-P-29 (flat) 0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

   Primer: MPI 50 0.0375 mm DFT
   Intermediate: MPI 53 (flat) 0.0375 mm DFT
   Topcoat: MPI 53 (flat) 0.0375 mm DFT]

2. [Primer: CID A-A-2994, Type II 0.0375 mm DFT
   Intermediate: FS TT-E-2784, [Note **][(semigloss)] 0.0375 mm DFT
   Topcoat: FS TT-E-2784, [Note **][(semigloss)] 0.0375 mm DFT

   [NOTE **: Eggshell shall conform to a gloss at 60 degrees between 10 and 25 units in accordance with ASTM D 523.]

EQUIVALENT CROSS-OVER MATCH

   [Primer: MPI 50 0.0375 mm DFT
   Intermediate: MPI 52 (eggshell) 0.0375 mm DFT
   Topcoat: MPI 52 (eggshell) 0.0375 mm DFT]

   [Primer: MPI 50 0.0375 mm DFT

TABLE 5

INTERIOR CONCRETE, CONCRETE MASONRY, [PLASTER][AND][WALLBOARD] SURFACES

Intermediate:	MPI 54 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 54 (semigloss)	0.0375 mm DFT]]

3. [Primer: CID A-A-2994, Type II 0.0500 mm DFT

Intermediate:	CID A-A-2246, [flat][eggshell][semigloss]	0.0375 mm DFT
Topcoat:	CID A-A-2246, [flat][eggshell][semigloss]	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

[Primer: MPI 50 0.0500 mm DFT

Intermediate:	MPI 138 (flat)	0.0375 mm DFT
Topcoat:	MPI 138 (flat)	0.0375 mm DFT]

[Primer: MPI 50 0.050 mm DFT

Intermediate:	MPI 139 (eggshell)	0.0375 mm DFT
Topcoat:	MPI 139 (eggshell)	0.0375 mm DFT]

[Primer: MPI 50 0.050 mm DFT

Intermediate:	MPI 141 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 141 (semigloss)	0.0375 mm DFT]]

B. Concrete ceilings, uncoated:

1. [Primer: As recommended by manufacturer of FS TT-C-555

Intermediate:	FS TT-C-555 Type I (see note)
Topcoat:	FS TT-C-555 Type I (see note)

NOTE: Sufficient coats to provide no less than 0.50 mm of finished coating system. Texture: [sand] [coarse]]

2. [[Primer: As recommended by manufacturer of MPI 41

Intermediate:	MPI 41	coarse texture (see note)
Topcoat:	MPI 41	coarse texture (see note)]

[Primer: As recommended by manufacturer of MPI 42

Intermediate:	MPI 42	medium texture (see note)
Topcoat:	MPI 42	medium texture (see note)]

NOTE: Sufficient coats to provide no less than 0.40 to 0.45 mm of coating.]

C. Concrete, except floors, in toilets [and other high humidity areas:]

1. [Primer: CID A-A-2994, Type II 0.0375 mm DFT

Intermediate:	CID A-A-50574 (semigloss)	0.0375 mm DFT
Topcoat:	CID A-A-50574 (semigloss)	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	MPI 50	0.0375 mm DFT
Intermediate:	MPI 47 (semigloss)	0.0375 mm DFT

TABLE 5

INTERIOR CONCRETE, CONCRETE MASONRY, [PLASTER][AND][WALLBOARD] SURFACES

Topcoat:	MPI 47 (semigloss)	0.0375 mm DFT]

2. [Primer: MIL-DTL-24441 /29 Formula 150 Type IV 0.075 mm DFT
   Intermediate: N/A
   Topcoat: MIL-DTL-24441*/27 Formula 157 Type IV 0.075 mm DFT

NOTE * or: Type IV topcoat formulas in other colors may be selected]

3. [Primer: CID A-A-2994, Type II 0.050 mm DFT
   Intermediate: CID A-A-2246, [flat][eggshell][semigloss] 0.0375 mm DFT
   Topcoat: CID A-A-2246, [flat][eggshell][semigloss] 0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 50	0.050 mm DFT
Intermediate:	MPI 138 (flat)	0.0375 mm DFT
Topcoat:	MPI 138 (flat)	0.0375 mm DFT]
[Primer:	MPI 50	0.050 mm DFT
Intermediate:	MPI 139 (eggshell)	0.0375 mm DFT
Topcoat:	MPI 139 (eggshell)	0.0375 mm DFT]
[Primer:	MPI 50	0.050 mm DFT
Intermediate:	MPI 141 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 141 (semigloss)	0.0375 mm DFT]]

4. [Primer: CID A-A-3120 Type C 0.0375 mm DFT
   Intermediate: N/A
   Topcoat: CID A-A-3120 Type C 0.0375 mm DFT]

D. Concrete masonry:

1. [Filler: CID A-A-1500 (Fill all holes in masonry surfaces)
   Primer: CID A-A-2994, Type II 0.050 mm DFT
   Intermediate: CID A-A-2246, [flat][eggshell][semigloss] 0.0375 mm DFT
   Topcoat: CID A-A-2246, [flat][eggshell][semigloss] 0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

[Filler:	MPI 4 (Fill all holes in masonry surface)	
Primer:	MPI 50	0.050 mm DFT
Intermediate:	MPI 138 (flat)	0.0375 mm DFT
Topcoat:	MPI 138 (flat)	0.0375 mm DFT]
[Filler:	MPI 4 (fill all holes in masonry surface)	
Primer:	MPI 50	0.050 mm DFT
Intermediate:	MPI 139 (eggshell)	0.0375 mm DFT
Topcoat:	MPI 139 (eggshell)	0.0375 mm DFT]
[Filler:	MPI 4 (fill all holes in masonry surface)	
Primer:	MPI 50	0.050 mm DFT

TABLE 5

INTERIOR CONCRETE, CONCRETE MASONRY, [PLASTER][AND][WALLBOARD] SURFACES

Intermediate:	MPI 141 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 141 (semigloss)	0.0375 mm DFT]]

E. Concrete masonry in toilets [and high humidity areas]:

1. [Filler: CID A-A-1500 (fill all holes in masonry surface)

Primer:	CID A-A-2994, Type II	0.0375 mm DFT
Intermediate:	CID A-A-2246, [flat][eggshell][semigloss]	0.0375 mm DFT
Topcoat:	CID A-A-2246, [flat][eggshell][semigloss]	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

[Filler: MPI 4 (Fill all holes in masonry surface)

Primer:	MPI 50	0.050 mm DFT
Intermediate:	MPI 138, (flat)	0.0375 mm DFT
Topcoat:	MPI 138, (flat)	0.0375 mm DFT]

[Filler: MPI 4 (Fill all holes in masonry surface)

Primer:	MPI 50	0.050 mm DFT
Intermediate:	MPI 139, (eggshell)	0.0375 mm DFT
Topcoat:	MPI 139, (eggshell)	0.0375 mm DFT]

[Filler: MPI 4 (Fill all holes in masonry surfaces)

Primer:	MPI 50	0.050 mm DFT
Intermediate:	MPI 141, (semigloss)	0.0375 mm DFT
Topcoat:	MPI 141, (semigloss)	0.0375 mm DFT]]

2. [Filler: CID A-A-1500 (fill all holes in masonry surface)

Primer:	CID A-A-2994, Type II	0.0375 mm DFT
Intermediate:	CID A-A-2962, [flat][NOTE **][semigloss]	0.0375 mm DFT
Topcoat:	CID A-A-2962, [flat][NOTE **][semigloss]	0.0375 mm DFT

[NOTE **: Eggshell shall conform to a gloss at 60 degrees between 10 and 25 units in accordance with ASTM D 523.]

EQUIVALENT CROSS-OVER MATCH

[Filler: MPI 4 (Fill all holes in masonry surface)

Primer:	MPI 50	0.050 mm DFT
Intermediate:	MPI 49, (flat)	0.0375 mm DFT
Topcoat:	MPI 49, (flat)	0.0375 mm DFT]

[Filler: MPI 4 (Fill all holes in masonry surface)

Primer:	MPI 50	0.050 mm DFT
Intermediate:	MPI 51, (eggshell)	0.0375 mm DFT
Topcoat:	MPI 51, (eggshell)	0.0375 mm DFT]

[Filler: MPI 4 (Fill all holes in masonry surfaces)

Primer:	MPI 50	0.050 mm DFT
Intermediate:	MPI 47, (semigloss)	0.0375 mm DFT
Topcoat:	MPI 47, (semigloss)	0.0375 mm DFT]]

TABLE 5

INTERIOR CONCRETE, CONCRETE MASONRY, [PLASTER][AND][WALLBOARD] SURFACES

3. [Primer:	MIL-DTL-24441 /29 Formula 150 Type IV	0.075 mm DFT
Intermediate:	N/A	
Topcoat:	MIL-DTL-24441* /31 Formula 152 Type IV	0.075 mm DFT

NOTE * or: Type IV topcoat formulas in other colors may be selected]

F. [Plaster] [and] [Wallboard] not otherwise specified:

1. [Primer:	CID A-A-2994, Type II	0.0375 mm DFT
Intermediate:	FS TT-P-29 (flat)	0.0375 mm DFT
Topcoat:	FS TT-P-29 (flat)	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	MPI 50	0.0375 mm DFT
Intermediate:	MPI 53 (flat)	0.0375 mm DFT
Topcoat:	MPI 53 (flat)	0.0375 mm DFT]

2. [Primer:	CID A-A-2994, Type II	0.0375 mm DFT
Intermediate:	FS TT-E-2784, [(Note **)][(semigloss)]	0.0375 mm DFT
Topcoat:	FS TT-E-2784, [(Note **)][(semigloss)]	0.0375 mm DFT

[NOTE **: Eggshell shall conform to a gloss at 60 degrees between 10 and 25 units in accordance with ASTM D 523.]

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 50	0.0375 mm DFT
Intermediate:	MPI 52 (eggshell)	0.0375 mm DFT
Topcoat:	MPI 52 (eggshell)	0.0375 mm DFT]

[Primer:	MPI 50	0.0375 mm DFT
Intermediate:	MPI 54 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 54 (semigloss)	0.0375 mm DFT]]

G. [Plaster] [and] [Wallboard] in toilets [and other high humidity areas]:

1. [Primer:	CID A-A-2994, Type II	0.050 mm DFT
Intermediate:	CID A-A-2246, [flat][eggshell][semigloss]	0.0375 mm DFT
Topcoat:	CID A-A-2246, [flat][eggshell][semigloss]	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 50	0.050 mm DFT
Intermediate:	MPI 138 (flat)	0.0375 mm DFT
Topcoat:	MPI 138 (flat)	0.0375 mm DFT]

[Primer:	MPI 50	0.050 mm DFT
Intermediate:	MPI 139 (eggshell)	0.0375 mm DFT
Topcoat:	MPI 139 (eggshell)	0.0375 mm DFT]

TABLE 5

INTERIOR CONCRETE, CONCRETE MASONRY, [PLASTER][AND][WALLBOARD] SURFACES

[Primer:	MPI 50	0.050 mm DFT
Intermediate:	MPI 141 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 141 (semigloss)	0.0375 mm DFT]]

2. [Primer
   - (non-shop-primed surfaces): CID A-A-2994 Type I 0.050 mm DFT
   Intermediate: CID A-A-2962 [flat][Note **][semigloss] 0.0375 mm DFT
   Topcoat: CID A-A-2962 [flat][Note **][semigloss] 0.0375 mm DFT

   [NOTE **: Eggshell shall conform to a gloss at 60 degrees between 10 and 25 units in accordance with ASTM D 523.]

EQUIVALENT CROSS-OVER MATCH

[[Primer - (non-shop-primed surfaces):	MPI 45	0.050 mm DFT
Intermediate:	MPI 49 (flat)	0.0375 mm DFT
Topcoat:	MPI 49 (flat)	0.0375 mm DFT]
[Primer - (non-shop-primed surfaces):	MPI 45	0.050 mm DFT
Intermediate:	MPI 51 (eggshell)	0.0375 mm DFT
Topcoat:	MPI 51 (eggshell)	0.0375 mm DFT]
[Primer - (non-shop-primed surfaces):	MPI 45	0.050 mm DFT
Intermediate:	MPI 47 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 47 (semigloss)	0.0375 mm DFT]]

TABLE 6
EXTERIOR WOOD [AND PLYWOOD] SURFACES

A. Wood and plywood, trim, including top, bottom and edges of doors:

1. [Primer:	CID A-A-2336	0.050 mm DFT
Intermediate:	CID A-A-3067 [semigloss][gloss]	0.0375 mm DFT
Topcoat:	CID A-A-3067 [semigloss][gloss]	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

[[Primer:	MPI 7	0.050 mm DFT
Intermediate:	MPI 94 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 94 (semigloss)	0.0375 mm DFT]
[Primer:	MPI 7	2.0 mils DFT
Intermediate:	MPI 9 (gloss)	0.0375 mm DFT
Topcoat:	MPI 9 (gloss)	0.0375 mm DFT]]

TABLE 6

EXTERIOR WOOD [AND PLYWOOD] SURFACES

2. [Primer:	CID A-A-2336	0.0375 mm DFT
Intermediate:	FS TT-E-2784, [(semigloss)][(gloss)]	0.0375 mm DFT
Topcoat:	FS TT-E-2784, [(semigloss)][(gloss)]	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 7	0.0375 mm DFT
Intermediate:	MPI 11 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 11 (semigloss)	0.0375 mm DFT]
[Primer:	MPI 7	0.0375 mm DFT
Intermediate:	MPI 119 (gloss)	0.0375 mm DFT
Topcoat:	MPI 119 (gloss)	0.0375 mm DFT]]

[B. Existing wood previously coated with Alkyd finish coat:

1. [Primer:	MPI 17	0.0375 mm DFT
Intermediate:	MPI 11 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 11 (semigloss)	0.0375 mm DFT]
[Primer:	MPI 17	0.0375 mm DFT
Intermediate:	MPI 119 (gloss)	0.0375 mm DFT
Topcoat:	MPI 119 (gloss)	0.0375 mm DFT]]

[C. Existing wood previously coated with latex finish coat:

1. [Primer:	N/A	
Intermediate:	MPI 11 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 11 (semigloss)	0.0375 mm DFT]
[Primer:	N/A	
Intermediate:	MPI 119 (gloss)	0.0375 mm DFT
Topcoat:	MPI 119 (gloss)	0.0375 mm DFT]]

[D. Uncoated and previously stained wood siding:

1. Primer:	N/A	
Intermediate:	N/A	
Topcoat:	FS TT-S-708	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	N/A	
Intermediate:	N/A	
Topcoat:	[MPI 13 (semi-transparent)	0.0375 mm DFT]
	[MPI 14 (solid color)	0.0375 mm DFT]]

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NOTE: (Table 7). Use latex gloss or semigloss paint in occupied buildings and where strong odors would be objectional. Where allowable, consider use

of eggshell or semigloss enamel in lieu of flat paint in areas subject to soiling, where gloss is not desired.

(Items A and F). For existing surfaces with alkyd enamel coating, do not specify latex paint which does not bond well to enamel. Avoid applying latex paint over alkyd primers.

(Items B thru E). Indicate locations where natural finish is required. Omit stain if a stained finish is not required.

(Item E). If pigmented floor coating is required, use 3 coats of low-VOC compliant FS TT-E-2784 in lieu of FS TT-E-487.

(Item F). List other high humidity areas requiring enamel finishes. For tile-like finishes, filler materials, and applications refer to Section 09963, "High-Build Glaze Coatings." These high performance coatings are used for exposure-resistant requirements and can be applied to wood, metal, and concrete substrates.

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TABLE 7

INTERIOR WOOD AND PLYWOOD SURFACES

A. Wood and plywood not otherwise specified:

1.[Primer: CID A-A-2994 Type I on softwood plywood 0.0375 mm DFT]
Intermediate: CID A-A-2962, [NOTE **][semigloss][gloss] 0.0375 mm DFT
Topcoat: CID A-A-2962, [NOTE **][semigloss][gloss] 0.0375 mm DFT

[NOTE **: Eggshell shall conform to a gloss at 60 degrees between 10 and 25 units in accordance with ASTM D 523.]

EQUIVALENT CROSS-OVER MATCH

[Primer: MPI 45 0.0375 mm DFT
Intermediate: MPI 51 (eggshell) 0.0375 mm DFT
Topcoat: MPI 51 (eggshell) 0.0375 mm DFT]

[Primer: MPI 45 0.0375 mm DFT
Intermediate: MPI 47 (semigloss) 0.0375 mm DFT
Topcoat: MPI 47 (semigloss) 0.0375 mm DFT]

[Primer: MPI 45 0.0375 mm DFT
Intermediate: MPI 48 (gloss) 0.0375 mm DFT
Topcoat: MPI 48 (gloss) 0.0375 mm DFT]]

B. Wood [except floors], natural finish:

TABLE 7

INTERIOR WOOD AND PLYWOOD SURFACES

1. [Primer: N/A
   Intermediate: FS TT-S-711 0.0375 mm DFT
   Topcoat: CID A-A-1800 (3 coats) 0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

   Primer: N/A
   Intermediate: MPI 90 0.0375 mm DFT
   Topcoat: MPI 28 (3 coats) 0.0375 mm DFT]

C. Plywood, natural finish:

1. Primer: N/A
   Intermediate: MPI 90 0.0375 mm DFT
   Topcoat: MPI 57 (3 coats) 0.0375 mm DFT

D. Wood floors, natural finish:

1. [Primer: N/A
   Intermediate: FS TT-S-711 0.0375 mm DFT
   Topcoat: FS TT-C-542 (3 coats) 0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

   Primer: N/A
   Intermediate: MPI 90 (one coat) 0.0375 mm DFT
   Topcoat: MPI 31 (three coats) 0.0375 mm DFT]

2. [Primer: FS TT-C-542 Type I 0.0375 mm DFT
   Intermediate: FS TT-C-542 Type I 0.0375 mm DFT
   Topcoat: FS TT-C-542 Type I 0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

   Primer: MPI 31 (one coat) 0.0375 mm DFT
   Intermediate: MPI 31 (one coat) 0.0375 mm DFT
   Topcoat: MPI 31 (one coat) 0.0375 mm DFT]

E. Wood floors, pigmented finish

1. [Primer: FS TT-E-487 0.0375 mm DFT
   Intermediate: FS TT-E-487 0.0375 mm DFT
   Topcoat: FS TT-E-487 0.0375 mm DFT]

2. [Primer: FS TT-E-2784 (semigloss)(gloss) 0.0375 mm DFT
   Intermediate: FS TT-E-2784 (semigloss)(gloss) 0.0375 mm DFT
   Topcoat: FS TT-E-2784 (semigloss)(gloss) 0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

TABLE 7

INTERIOR WOOD AND PLYWOOD SURFACES

[Primer:	MPI 10 Flat	0.0375 mm DFT
Intermediate:	MPI 11 Semigloss	0.0375 mm DFT
Topcoat:	MPI 11 Semigloss	0.0375 mm DFT]
[Primer:	MPI 10 Flat	0.0375 mm DFT
Intermediate:	MPI 119 Gloss	0.0375 mm DFT
Topcoat:	MPI 119 Gloss	0.0375 mm DFT]]

F. Wood surfaces in toilets [and other high humidity areas]:

1. [As specified in Section 09963, "High-Build Glaze Coatings."]

2.

[Primer:	CID A-A-2994 Type I	0.0375 mm DFT
Intermediate:	CID A-A-2962, [(semigloss)][(gloss)]	0.0375 mm DFT
Topcoat:	CID A-A-2962, [(semigloss)][(gloss)]	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 45	0.0375 mm DFT
Intermediate:	MPI 47 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 47 (semigloss)	0.0375 mm DFT]
[Primer:	MPI 45	0.0375 mm DFT
Intermediate:	MPI 48 (gloss)	0.0375 mm DFT
Topcoat:	MPI 48 (gloss)	0.0375 mm DFT]

3.

[Primer:	CID A-A-2994 Type II	0.0375 mm DFT
Intermediate:	CID A-A-2246 [(semigloss)][(gloss)]	0.0375 mm DFT
Topcoat:	CID A-A-2246 [(semigloss)][(gloss)]	0.0375 mm DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 50	0.0375 mm DFT
Intermediate:	MPI 141 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 141 (semigloss)	0.0375 mm DFT]
[Primer:	MPI 50	0.0375 mm DFT
Intermediate:	MPI 114 (gloss)	0.0375 mm DFT
Topcoat:	MPI 114 (gloss)	0.0375 mm DFT]]

G. Natural finish wood doors:

1.

[Primer:	FS TT-S-711 (one coat)
Intermediate:	CID A-A-2335 sealer (one coat) and sand with 220 grit
Topcoat:	FS TT-C-542 (two coats)

EQUIVALENT CROSS-OVER MATCH

Primer:	MPI 90 (one coat)
Intermediate:	MPI 91 (one coat) and sand with 220 grit
Topcoat:	MPI 31 (two coats)]

TABLE 7

INTERIOR WOOD AND PLYWOOD SURFACES

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NOTE: (Table 1, Item C). Use MIL-PRF-85285 in severe environments with durable glossy appearance. Use latex systems where MIL-P-24441 is not allowed. MIL-PRF-85285, urethane, and MIL-P-24441, Types II and IV epoxies are allowed in California. For selection of top coats, use first bracket option for geographic areas that do not have harsh environmental conditions. Use the second bracket option for areas that have harsh corrosive environments.

(Item E). Use CID A-A-50557 and CID A-A-50570 over existing alkyd or latex paints and MIL-DTL-24441/1 over existing epoxy systems.

(Item F). In first bracket option, select appropriate top coat. Use first top coat option for geographic areas that do not have harsh environmental conditions. Use the second top coat option for areas that have harsh, corrosive environments. The second bracket option is an equivalent alternate system.

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NOTE: Federal and Military specification paint cross matches for MPI (Master Paint Institute) paints and surface tone characteristics shall be as follows:

CID A-A-1500 Sealer, Surface (Latex Block Filler)
(cross match)
MPI 4
CID A-A-1800 Varnish, Oil: Spar
(cross match)
MPI 28
CID A-A-2246 High Performance Latex (Cross match)
MPI 138 flat
MPI 139 eggshell
MPI 141 semigloss
MPI 114 gloss
CID A-A-2335 Sealer, Surface (Varnish Type, Wood and Cork Floors)
(cross match)
MPI 91 (top coated w/MPI 56, 57, 73, 74, or 75 only)
CID A-A-2336 Primer Coating,(Oil-Alkyd, Exterior Wood, White and Tints)
(cross match)

MPI 7 (for new work)
MPI 5 (for existing work)
CID A-A-2962 Alkyd Enamel, Class A, Grade B (semigloss) cross match is MPI 47 (semigloss); Class A, Grade C (gloss) cross match is MPI 48 (gloss). Other gloss levels include, MPI 49 (flat) and MPI 51 (eggshell).
CID A-A-2994 Primer Coating, Interior, for Walls and Wood (cross match) MPI 50
CID A-A-3054 Paint, Heat Resisting (400 F) (cross match) MPI 2
CID A-A-3067 Paint, Alkyd, Exterior, Low VOC (cross-match) MPI 94 semigloss MPI 9 gloss
CID A-A-50557 Primer, Water-Borne, Acrylic/Modified Acrylic (for galvanized, cross match) MPI 134
CID A-A-50570 Water-Borne, Acrylic/Modified Acrylic (cross match) MPI 110 [1-gloss][2-semigloss][3-eggshell]
CID A-A50574 Enamel, Odorless, Alkyd, Interior, Semigloss, White and Tints (cross match) MPI 47 semigloss
TT-P-19 Latex, Acrylic Emulsion (cross match) MPI 10 flat
TT-P-28 Paint, Aluminum, Heat Resisting (1200 F) (cross match) MPI 22 (1100 F)
TT-P-29 Latex Base (cross match) MPI 53 flat MPI 52 eggshell MPI 54 semigloss MPI 114 gloss
TT-C-542 Coating, Polyurethane, Oil-Free, Moisture Curing (cross match) MPI 31
TT-E-2784 Enamel (Acrylic Emulsion, Exterior) Type II, semi-gloss (cross match) MPI 11 semi-gloss. Type I, gloss (cross match) MPI 119 gloss.
TT-P-664 Primer Coating, Alkyd, Corrosion-Inhibiting, Lead and Chromate Free, VOC-

Compliant
(cross match)
MPI 79
TT-S-708 Stain, Oil: Semi-Transparent, Wood, Exterior
(cross match)
MPI 13 semi-transparent
TT-S-711 Stain, oil: Semi-Transparent, Wood, Exterior
(cross match)
MPI 90

NOTE: Gloss levels of FS TT-E-2784 and CID A-A-2962: When specifying FS TT-E-2784 and corresponding MPI 11 and MPI 119 or CID A-A-2962, Class A, Grades B, C, or equivalent eggshell, the acceptable gloss level equivalents are as follows:

FS TT-E-2784, Type II(semigloss); MPI 11(semigloss)
FS TT-E-2784, Type I(gloss); MPI 119(gloss)
FS TT-E-2784, Note **(eggshell); MPI 52(eggshell)
CID A-A-2246, Type I, Class 1(flat); MPI 138(flat)
CID A-A-2246, Type I, Class 2(eggshell); MPI 139 (eggshell)
CID A-A-2246, Type I, Class 3(semigloss); MPI 141 (semigloss)
CID A-A-2962, Grade B(semigloss); MPI 47(semigloss)
CID A-A-2962, Grade C(gloss); MPI 48(gloss)
CID A-A-2962, Note **(eggshell); MPI 51(eggshell)

NOTE **: Eggshell shall conform to a gloss at 60 degrees between 10 and 25 units in accordance with ASTM D 523.

TABLE 1

EXTERIOR METAL SURFACES

A. New Steel that has been blast-cleaned (up to SSPC SP 6):

1. [Primer: FS TT-P-664 1.5 mils DFT
Intermediate: CID A-A-3067 [semigloss][gloss] 1.5 mils DFT
Topcoat: CID A-A-3067 [semigloss][gloss] 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

[Primer: MPI 79 1.5 mils DFT
Intermediate: MPI 94 (semigloss) 1.5 mils DFT
Topcoat: MPI 94 (semigloss) 1.5 mils DFT]

TABLE 1

EXTERIOR METAL SURFACES

[Primer:	MPI 79	1.5 mils DFT
Intermediate:	MPI 9 (gloss)	1.5 mils DFT
Topcoat:	MPI 9 (gloss)	1.5 mils DFT]]

B. Existing steel that has been spot-blasted (up to SSPC SP 6):

1. [Surface previously coated with alkyd or latex:

Spot Primer:	MPI 101	1.5 mils DFT
Intermediate:	MPI 110 [1 (gloss)][2 (semigloss)]	1.5 mils DFT
Topcoat:	MPI 110 [1 (gloss)][2 (semigloss)]	1.5 mils DFT]

2. [Surface previously coated with epoxy:

Spot Primer:	MIL-DTL-24441 /29 Formula 150 Type IV	1.5 mils DFT
Intermediate:	N/A	
Topcoat:	[[CID A-A-50570 (semigloss)	1.5 mils DFT]
	[MIL-PRF-85285 (gloss)	1.5 mils DFT]]

C. New [and existing] steel blasted to SSPC SP 10:

1.

Primer:	MIL-DTL-24441 /29 Formula 150 Type IV	3.0 mils DFT
Intermediate:	MIL-DTL-24441 /31 Formula 152 Type IV	3.0 mils DFT
Topcoat:	[[CID A-A-50570 (semigloss)	1.5 mils DFT]
	[MIL-PRF-85285 (gloss)	2.0 mils DFT]]

EXTERIOR METAL SURFACES (GALVANIZED)

D. New galvanized surfaces:

1.

[Primer:	FS TT-P-19 (flat)	1.5 mils DFT
Intermediate:	N/A	
Topcoat:	FS TT-P-19 (flat)	1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	MPI 10 (flat)	1.5 mils DFT
Intermediate:	N/A	
Topcoat:	MPI 10 (flat)	1.5 mils DFT]

2.

[Primer:	FS TT-P-19 (flat)	1.5 mils DFT
Intermediate:	N/A	
Topcoat:	FS TT-E-2784 [(semigloss)][(gloss)]	1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 10 (flat)	1.5 mils DFT
Intermediate:	N/A	
Topcoat:	MPI 11 (semigloss)	1.5 mils DFT]

TABLE 1

EXTERIOR METAL SURFACES

[Primer:	MPI 10 (flat)	1.5 mils DFT
Intermediate:	N/A	
Topcoat:	MPI 119 (gloss)	1.5 mils DFT]]

3. [Primer: CID A-A-50557 1.5 mils DFT
   Intermediate: N/A
   Topcoat: CID A-A-50570 (semigloss) 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

   Primer: MPI 134 1.5 mils DFT
   Intermediate: N/A
   Topcoat: MPI 110 [2 (semigloss)][1 (gloss)] 1.5 mils DFT]

4. [Primer: Mil-DTL-24441/29 Formula 150 Type IV 2.0 mils DFT
   Intermediate: N/A
   Topcoat: [[CID A-A-50570 (semigloss) 1.5 mils DFT]
   [MIL-PRF-85285 (gloss) 1.5 mils DFT]]

EQUIVALENT CROSS-OVER MATCH

   Primer: SSPC Paint 22 2.0 mils DFT
   Intermediate: N/A
   Topcoat: SSPC Paint 104 (gloss) 1.0 mils DFT]

E. Galvanized surfaces with slight coating deterioration; little or no rusting:

1. [Spot Prime: CID A-A-50557 3.0 mils DFT
   Intermediate: N/A
   Topcoat: CID A-A-50570 (semigloss) 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

   Primer: MPI 134 1.5 mils DFT
   Intermediate: N/A
   Topcoat: MPI 110 2 (semigloss) 1.5 mils DFT]

2. [Spot Prime: MIL-DTL-24441 /29 Formula 150 Type IV 3.0 mils DFT
   Intermediate: N/A
   Topcoat: MIL-PRF-85285 (gloss) 2.0 mils DFT]

F. Galvanized surfaces with severely deteriorated coating or rusting:

1. [Primer: MIL-DTL-24441 /29 Formula 150 Type IV 3.0 mils DFT
   Intermediate: MIL-DTL-24441 /31 Formula 152 Type IV 3.0 mils DFT
   Topcoat: [CID A-A-50570 (semigloss) 1.5 mils DFT]
   [MIL-PRF-85285 (gloss) 2.0 mils DFT]]

2. [Primer: MPI 101 2.5 mils DFT

TABLE 1

EXTERIOR METAL SURFACES

Intermediate:	MPI 98	2.5 mils DFT
Topcoat:	MPI 110 [2 (semigloss)][1 (gloss)]	2.0 mils DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	SSPC Paint 22	2.5 mils DFT
Intermediate:	SSPC Paint 22	2.5 mils DFT
Topcoat:	SSPC Paint 24 (semigloss)	2.0 mils DFT]

OTHER EXTERIOR METAL SURFACES

G. [Terne-coated and other] Metal, except roof surfaces, not otherwise specified:

1. [Primer: FS TT-P-664 2.0 mils DFT
   Intermediate: CID A-A-3067 [(semigloss)][(gloss)] 1.5 mils DFT
   Topcoat: CID A-A-3067 [(semigloss)][(gloss)] 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 79	1.5 mils DFT
Intermediate:	MPI 94 (semigloss)	1.5 mils DFT
Topcoat:	MPI 94 (semigloss)	1.5 mils DFT]

[Primer:	MPI 79	1.5 mils DFT
Intermediate:	MPI 9 (gloss)	1.5 mils DFT
Topcoat:	MPI 9 (gloss)	1.5 mils DFT]]

2. [Primer: FS TT-P-664 1.5 mils DFT
   Intermediate: CID A-A-50570 (semigloss) 1.5 mils DFT
   Topcoat: CID A-A-50570 (semigloss) 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	MPI 79	1.5 mils DFT
Intermediate:	MPI 110 [2 (semigloss)][1 (gloss)]	1.5 mils DFT
Topcoat:	MPI 110 [2 (semigloss)][1 (gloss)]	1.5 mils DFT]

H. Existing roof surfaces previously coated:

1. [ASTM D 2824: Sufficient coats to provide not less than 8.0 mils]

2. [Primer: FS TT-P-38 1.5 mils DFT
   Intermediate: N/A
   Topcoat: FS TT-P-38 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	MPI 1	1.5 mils DFT
Intermediate:	N/A	
Topcoat:	MPI 1	1.5 mils DFT]

TABLE 1

EXTERIOR METAL SURFACES

NOTE: (For Table 2). Use latex gloss or semigloss paint for occupied buildings and areas where strong odors would be objectionable. Where allowable, consider use of eggshell or semigloss enamel in lieu of flat paint for areas subject to soiling where gloss is not desired.

(Item A). Generally, for existing surfaces which have alkyd enamel coating, do not specify latex paint which does not bond well to enamel. Also avoid applying latex paint over alkyd primers.

(Items B and C). For new or existing uncoated surfaces requiring non-slip coating, specify MIL-C-24667. For rusted surfaces, modify surface preparation to include near white blast cleaning in accordance with SSPC SP 10 prior to coating application.

(Item D). List other high humidity areas requiring enamel finishes. For tile-like finishes, filler materials, and applications refer to Section 09963, "High-Build Glaze Coating." These high performance coatings are normally used to meet exposure-resistant requirements and can be applied to wood, metal, and concrete substrates.

When an alkyd enamel finish is desired, select the alkyd, enamel intermediate and top coating with the type gloss finish desired.

TABLE 2

INTERIOR METAL SURFACES

A. Metal (except floors) not otherwise specified:

1. [Primer
   - (non-shop-primed surfaces): FS TT-P-664 2.0 mils DFT
   Intermediate: CID A-A-2962 [flat][Note **][semigloss][gloss]1.5 mils DFT
   Topcoat: CID A-A-2962 [flat][Note **][semigloss][gloss]1.5 mils DFT

[NOTE **: Eggshell shall conform to a gloss at 60 degrees between 10 and 25 units in accordance with ASTM D 523.]

TABLE 2

INTERIOR METAL SURFACES

EQUIVALENT CROSS-OVER MATCH

[Primer - (non-shop-primed surfaces):	MPI 79	2.0 mils DFT
Intermediate:	MPI 49 (flat)	1.5 mils DFT
Topcoat:	MPI 49 (flat)	1.5 mils DFT]
[Primer - (non-shop-primed surfaces):	MPI 79	2.0 mils DFT
Intermediate:	MPI 51 (eggshell)	1.5 mils DFT
Topcoat:	MPI 51 (eggshell)	1.5 mils DFT]
[Primer - (non-shop-primed surfaces):	MPI 79	2.0 mils DFT
Intermediate:	MPI 47 (semigloss)	1.5 mils DFT
Topcoat:	MPI 47 (semigloss)	1.5 mils DFT]
[Primer - (non-shop-primed surfaces):	MPI 79	2.0 mils DFT
Intermediate:	MPI 48 (gloss)	1.5 mils DFT
Topcoat:	MPI 48 (gloss)	1.5 mils DFT]]

2. [Primer (non-shop-primed surfaces): FS TT-P-664 2.0 mils DFT
   Intermediate: CID A-A-2246, [flat][eggshell][semigloss] 1.5 mils DFT
   Topcoat: CID A-A-2246, [flat][eggshell][semigloss] 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 79	2.5 mils DFT
Intermediate:	MPI 138 (flat)	1.5 mils DFT
Topcoat:	MPI 138 (flat)	1.5 mils DFT]
[Primer:	MPI 79	2.5 mils DFT
Intermediate:	MPI 139 (eggshell)	1.5 mils DFT
Topcoat:	MPI 139 (eggshell)	1.5 mils DFT]
[Primer:	MPI 79	2.5 mils DFT
Intermediate:	MPI 141 (semigloss)	1.5 mils DFT
Topcoat:	MPI 141 (semigloss)	1.5 mils DFT]]

B. Metal floors (non-shop-primed surfaces):

1. Primer:	FS TT-P-664	2.0 mils DFT
Intermediate:	MIL-C-24667 (non-skid)	5.0-10.0 mils DFT
Topcoat:	MIL-C-24667 (non-skid)	5.0-10.0 mils DFT

C. Metal floors (non-slip deck surfaces):

1. Primer: MIL-DTL-24441/29 Formula 150 Type IV 3.0 mils DFT

TABLE 2

INTERIOR METAL SURFACES

Intermediate:	MIL-C-24667 (non-skid)	5.0-10.0 mils DFT
Topcoat:	MIL-C-24667 (non-skid)	5.0-10.0 mils DFT

D. Metal in toilets [and other high-humidity areas]:

1. [Primer
   - (non-shop-primed surfaces): FS TT-P-664 2.0 mils DFT
   Intermediate: CID A-A-2962 [flat][Note **][semigloss][gloss] 1.5 mils DFT
   Topcoat: CID A-A-2962 [flat][Note **][semigloss][gloss] 1.5 mils DFT

[NOTE **: Eggshell shall conform to a gloss at 60 degrees between 10 and 25 units in accordance with ASTM D 523.]

EQUIVALENT CROSS-OVER MATCH

[[Primer		
- (non-shop-primed surfaces):	MPI 79	2.0 mils DFT
Intermediate:	MPI 49 (flat)	1.5 mils DFT
Topcoat:	MPI 49 (flat)	1.5 mils DFT]
[Primer		
- (non-shop-primed surfaces):	MPI 79	2.0 mils DFT
Intermediate:	MPI 51 (eggshell)	1.5 mils DFT
Topcoat:	MPI 51 (eggshell)	1.5 mils DFT]
[Primer		
- (non-shop-primed surfaces):	MPI 79	2.0 mils DFT
Intermediate:	MPI 47 (semigloss)	1.5 mils DFT
Topcoat:	MPI 47 (semigloss)	1.5 mils DFT]
[Primer		
- (non-shop-primed surfaces):	MPI 79	2.0 mils DFT
Intermediate:	MPI 48 (gloss)	1.5 mils DFT
Topcoat:	MPI 48 (gloss)	1.5 mils DFT]]

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(Item D.2) Heat Resistant Silicone Based Paints: In accordance with Steel Structures Painting Council (SSPC) "Systems and Specifications", Volume 2, the choice of paints for specific applications will depend on the operational conditions and the service desired. The application temperature should be between 50 to 120 degrees F and the cure required will vary from room temperature with unspecified time to an elevated temperature and/or curing time. Curing requirements should be determined before specifying so that the suppler will be aware of requirements. The dry film thickness of silicone-modified organic coatings with an operating

temperatures between 250 to 600 degrees F should be between 102 to 152 microns. For Silicone ceramic Silicone-modified organic operating between 421 to 1200 degrees F, dry film thickness should be between 25 to 102 microns. Provide the appropriate type within brackets.

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TABLE 3

BUILDING SYSTEMS SURFACES: INTERIOR AND EXTERIOR

Mechanical, electrical, [Fire extinguishing sprinkler systems including valves, conduit, hangers, supports,] [exposed copper piping,] and miscellaneous metal items, except hot metal surfaces and new prefinished equipment.

A. Surfaces not adjacent to painted surfaces:

1. [Primer:	FS TT-P-664		2.0 mils DFT
Intermediate:	CID A-A-2962 [(semigloss)][(gloss)]		1.5 mils DFT
Topcoat:	CID A-A-2962 [(semigloss)][(gloss)]		1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 79		1.5 mils DFT
Intermediate:	MPI 47	(semigloss)	1.5 mils DFT
Topcoat:	MPI 47	(semigloss)	1.5 mils DFT]
[Primer:	MPI 79		1.5 mils DFT
Intermediate:	MPI 48	(gloss)	1.5 mils DFT
Topcoat:	MPI 48	(gloss)	1.5 mils DFT]]
2. [Primer:	TT-P-664		1.5 mils DFT
Intermediate:	CID A-A-50570 (semigloss)		1.5 mils DFT
Topcoat:	CID A-A-50570 (semigloss)		1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	MPI 79		1.5 mils DFT
Intermediate:	MPI 110	[1 (gloss)][2 (semigloss)]	1.5 mils DFT
Topcoat:	MPI 110	[1 (gloss)][2 (semigloss)]	1.5 mils DFT]

B. Surfaces adjacent to painted surfaces: Coating systems as specified. Color of topcoat to match adjacent surfaces: 0.0375 mm DFT for each coat.

C. New [fire extinguishing sprinkler systems,] exposed piping [and equipment]:

1. [Primer:	FS TT-P-664		1.5 mils DFT
Intermediate:	CID A-A-2962 [(semigloss)][(gloss)]		1.5 mils DFT

TABLE 3

BUILDING SYSTEMS SURFACES: INTERIOR AND EXTERIOR

Topcoat:	CID A-A-2962 [(semigloss)][(gloss)]	1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 79	1.5 mils DFT
Intermediate:	MPI 47 (semigloss)	1.5 mils DFT
Topcoat:	MPI 47 (semigloss)	1.5 mils DFT]

[Primer:	MPI 79	1.5 mils DFT
Intermediate:	MPI 48 (gloss)	1.5 mils DFT
Topcoat:	MPI 48 (gloss)	1.5 mils DFT]]

2. [Primer: MIL-DTL-24441 /29 Formula 150, Type IV 3.0 mils DFT
   Intermediate: N/A
   Topcoat: MIL-DTL-24441 /31 Formula 152, Type IV 3.0 mils DFT]

3. [Primer: MIL-DTL-24441 /29 Formula 150, Type IV 3.0 mils DFT
   Intermediate: N/A
   Topcoat: MIL-PRF-85285 (gloss) 2.0 mils DFT]

D. Hot metal surfaces [including smokestacks] subject to temperatures up to 650 degrees F:

1. [Primer: N/A
   Intermediate: CID A-A-3054 1.5 mils DFT
   Topcoat: CID A-A-3054 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

Primer: N/A
Intermediate: MPI 2 1.5 mils DFT
Topcoat: MPI 2 1.5 mils DFT]

2. [Primer: N/A
   Intermediate: SSPC Paint 20 Type I-[_____] _._ mils DFT
   Topcoat: SSPC Paint 20 Type I-[_____] _._ mils DFT]

E. [New surfaces][and] [Existing surfaces] made bare cleaning SSPC SP 10 subject to temperatures up to 1100 degrees F:

1. [Primer: N/A
   Intermediate: FS TT-P-28 1.5 mils DFT
   Topcoat: FS TT-P-28 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

Primer: N/A
Intermediate: MPI 22 1.5 mils DFT
Topcoat: MPI 22 1.5 mils DFT]

F. Insulation and surfaces of insulation coverings:

TABLE 3

BUILDING SYSTEMS SURFACES: INTERIOR AND EXTERIOR

1. [Primer:	N/A	
Intermediate:	FS TT-P-19 (flat)	1.5 mils DFT
Topcoat:	FS TT-P-19 (flat)	1.5 mils DFT
	EQUIVALENT CROSS-OVER MATCH	
Primer:	N/A	
Intermediate:	MPI 10 (flat)	1.5 mils DFT
Topcoat:	MPI 10 (flat)	1.5 mils DFT]
2. [Primer:	N/A	
Intermediate:	FS TT-E-2784 [(semigloss)][(gloss)]	1.5 mils DFT
Topcoat:	FS TT-E-2784 [(semigloss)][(gloss)]	1.5 mils DFT
	EQUIVALENT CROSS-OVER MATCH	
[Primer:	N/A	
Intermediate:	MPI 11 (semigloss)	1.5 mils DFT
Topcoat:	MPI 11 (semigloss)	1.5 mils DFT]
[Primer:	N/A	
Intermediate:	MPI 119 (gloss)	1.5 mils DFT
Topcoat:	MPI 119 (gloss)	1.5 mils DFT]]

G. Cloth and paper covering on insulation:

1. Primer:	Glue size and primer recommended by material manufacturer, one coat each.
Intermediate:	N/A
Topcoat:	Coating to match adjacent surfaces.

****

NOTE: (Table 4). For applications of block filler that meets requirements for resistance to wind-driven rain or resistance to hydrostatic pressure, specify filler materials and applications of Section 09963, "High-Build Glaze Coating."

(Items B and C). Except for new cast-in-place concrete walls in Iceland, use FS TT-P-19. Use FS TT-C-555, for accent panels, special effect, or ceilings.

Fill Coat: Normally new concrete and stucco are sufficiently dense, therefore do not need a fill coat. Concrete masonry and existing concrete that have weathered and become open and porous do need a fill coat.

Color: Main reason for painting concrete and stucco is to obtain desired color. Before specifying paint systems, coordinate with other specification sections to confirm that concrete does not have special waterproof finish or applied, colored cementitious finish and that stucco does not have color pigment integral with mix.

Do not use FS TT-P-19 on new cast-in-place concrete wall surfaces in Iceland. Specify "steinakryl" which is a solvent-borne acrylic paint applied to vertical or near vertical cast-in-place concrete walls. The wall top should be protected by cap or by combination of clear penetrating waterproofing solution and "steinakryl" called, "Steinvari 2000." These products are acceptable and available to the Iceland Prime Contractor.

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TABLE 4

EXTERIOR CONCRETE, CONCRETE MASONRY, STUCCO, AND ASBESTOS-CEMENT SURFACES

A. New [and existing] concrete; including soffits but excluding tops of slabs:

1. [Primer:	As recommended by manufacturer of FS TT-P-19	
Intermediate:	FS TT-P-19 (flat)	1.5 mils DFT
Topcoat:	FS TT-P-19 (flat)	1.5 mils DFT
	EQUIVALENT CROSS-OVER MATCH	
Primer:	As recommended by manufacturer of MPI 10	
Intermediate:	MPI 10 (flat)	1.5 mils DFT
Topcoat:	MPI 10 (flat)	1.5 mils DFT]
2. [Primer:	As recommended by manufacturer of FS TT-E-2784	
Intermediate:	FS TT-E-2784 [(semigloss)][(gloss)]	1.5 mils DFT
Topcoat:	FS TT-E-2784 [(semigloss)][(gloss)]	1.5 mils DFT
	EQUIVALENT CROSS-OVER MATCH	
[Primer:	As recommended by manufacturer of MPI 11	
Intermediate:	MPI 11 (semigloss)	1.5 mils DFT
Topcoat:	MPI 11 (semigloss)	1.5 mils DFT]
[Primer:	N/A	
Intermediate:	MPI 119 (gloss)	1.5 mils DFT
Topcoat:	MPI 119 (gloss)	1.5 mils DFT]]
3. [Primer:	As recommended by manufacturer of FS TT-C-555	
Intermediate:	FS TT-C-555, Type II (see note)	
Topcoat:	FS TT-C-555, Type II (see note)	

TABLE 4

EXTERIOR CONCRETE, CONCRETE MASONRY, STUCCO, AND ASBESTOS-CEMENT SURFACES

NOTE: Sufficient coats to provide no less than 20 mils of finished coating system. Texture: [sand] [coarse]]

4. [Primer: As recommended by manufacturer of MPI 113
Intermediate: MPI 113 (see note)
Topcoat: MPI 113 (see note)

NOTE: Sufficient coats to provide no less than 16 to 18 mils of finished coating system. Texture: smooth]

B. New [and existing] concrete masonry on uncoated surface:

1. [Primer: CID A-A-1500 [on existing surface imperfections]
Intermediate: FS TT-P-19 (flat) 1.5 mils DFT
Topcoat: FS TT-P-19 (flat) 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

Primer: MPI 4 [on existing surface imperfections] 1.5 mils DFT
Intermediate: MPI 10 (flat) 1.5 mils DFT
Topcoat: MPI 10 (flat) 1.5 mils DFT]

2. [Primer: CID A-A-1500 [on existing surface imperfections]
Intermediate: FS TT-P-19 (flat) 1.5 mils DFT
Topcoat: FS TT-E-2784 [(semigloss)][(gloss)] 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

[Primer: MPI 4 [on existing surface imperfections] 1.5 mils DFT
Intermediate: MPI 11 (semigloss) 1.5 mils DFT
Topcoat: MPI 11 (semigloss) 1.5 mils DFT]

[Primer: MPI 4 [on existing surface imperfections] 1.5 mils DFT
Intermediate: MPI 119 (gloss) 1.5 mils DFT
Topcoat: MPI 119 (gloss) 1.5 mils DFT]]

3. [Primer: As recommended by manufacturer of FS TT-C-555
Intermediate: FS TT-C-555, Type II (see note)
Topcoat: FS TT-C-555, Type II (see note)

NOTE: Sufficient coats to provide no less than 20 mils of finished coating system. Texture: [sand] [coarse]]

4. [Primer: As recommended by manufacturer of MPI 113
Intermediate: MPI 113 (see note)
Topcoat: MPI 113 (see note)

NOTE: Sufficient coats to provide no less than 16 to 18 mils of finished coating system. Texture: smooth]

TABLE 4

EXTERIOR CONCRETE, CONCRETE MASONRY, STUCCO, AND ASBESTOS-CEMENT SURFACES

C. New [and existing] stucco:

1. [Primer: FS TT-P-19 New work or spot prime existing 1.5 mils DFT
Intermediate: FS TT-P-19 (flat) 1.5 mils DFT
Topcoat: FS TT-P-19 (flat) 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

Primer: MPI 10 New work or spot prime existing 1.5 mils DFT
Intermediate: MPI 10 (flat) 1.5 mils DFT
Topcoat: MPI 10 (flat) 1.5 mils DFT]

2. [Primer: FS TT-P-19 New work or spot prime existing 1.5 mils DFT
Intermediate: FS TT-E-2784 [(semigloss)][(gloss)] 1.5 mils DFT
Topcoat: FS TT-E-2784 [(semigloss)][(gloss)] 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

[Primer: MPI 11 New work or spot prime existing 1.5 mils DFT
Intermediate: MPI 11 (semigloss) 1.5 mils DFT
Topcoat: MPI 11 (semigloss) 1.5 mils DFT]

[Primer: MPI 119 New work or spot prime existing 1.5 mils DFT
Intermediate: MPI 119 (gloss) 1.5 mils DFT
Topcoat: MPI 119 (gloss) 1.5 mils DFT]]

3. [Primer: As recommended by manufacturer of FS TT-C-555
Intermediate: FS TT-C-555, Type II (see note)
Topcoat: FS TT-C-555, Type II (see note)

NOTE: Sufficient coats to provide no less than 20 mils of finished coating system. Texture: [sand] [coarse]]

4. [Primer: As recommended by manufacturer of MPI 113
Intermediate: MPI 113 (see note)
Topcoat: MPI 113 (see note)

NOTE: Sufficient coats to provide no less than 16 to 18 mils of finished coating system. Texture: Smooth]

D. Asbestos cement:

1. [Primer: FS TT-P-19 New work or spot prime existing 1.5 mils DFT
Intermediate: FS TT-P-19 (flat) 1.5 mils DFT
Topcoat: FS TT-P-19 (flat) 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

Primer: MPI 10 New work or spot prime existing 1.5 mils DFT

TABLE 4

EXTERIOR CONCRETE, CONCRETE MASONRY, STUCCO, AND ASBESTOS-CEMENT SURFACES

Intermediate:	MPI 10 (flat)	1.5 mils DFT
Topcoat:	MPI 10 (flat)	1.5 mils DFT]

2. [Primer: FS TT-P-19 New work or spot prime existing 1.5 mils DFT

Intermediate:	FS TT-E-2784 [(semigloss)][(gloss)]	1.5 mils DFT
Topcoat:	FS TT-E-2784 [(semigloss)][(gloss)]	1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 11 New work or spot prime existing	1.5 mils DFT
Intermediate:	MPI 11 (semigloss)	1.5 mils DFT
Topcoat:	MPI 11 (semigloss)	1.5 mils DFT]

[Primer:	MPI 119 New work or spot prime existing	1.5 mils DFT
Intermediate:	MPI 119 (gloss)	1.5 mils DFT
Topcoat:	MPI 119 (gloss)	1.5 mils DFT]]

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NOTE: (Table 5). Use latex gloss or semigloss paint for occupied buildings and where strong odors would be objectional. Where allowable, consider eggshell or semigloss enamel in lieu of flat paint for areas subject to soiling where gloss is not desired.

For existing surfaces with alkyd enamel coating, do not specify latex paint which does not bond well to enamel. Avoid applying latex paint over alkyd primers.

(Item B). For hiding imperfections in new concrete ceilings. Do not specify in wet or humid areas or for previously painted surfaces.

(Item C). List other high humidity areas requiring enamel finishes. For tile-like finishes, filler materials, and applications refer to Section 09963, "High-Build Glaze Coating." These high performance coatings are normally used to meet exposure-resistant requirements and can be applied to wood, metal, and concrete substrates.

Specify rubber paint, CID A-A-3120, Type C, on new or uncoated existing surfaces or existing surfaces previously coated with rubber paint.

Use (low lustre) eggshell latex, CID A-A-2246, in lieu of FS TT-P-19 if more soil resistant finish is desired than flat latex.

Use CID A-A-1500 filler if smooth surface is required on CMU surfaces.

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TABLE 5

INTERIOR CONCRETE, CONCRETE MASONRY, [PLASTER][AND][WALLBOARD] SURFACES

A. Concrete not specified otherwise, except floors [and ceilings]:

1. [Primer:	CID A-A-2994, Type II	1.5 mils DFT
Intermediate:	FS TT-P-29 (flat)	1.5 mils DFT
Topcoat:	FS TT-P-29 (flat)	1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	MPI 50	1.5 mils DFT
Intermediate:	MPI 53 (flat)	1.5 mils DFT
Topcoat:	MPI 53 (flat)	1.5 mils DFT]

2. [Primer:	CID A-A-2994, Type II	1.5 mils DFT
Intermediate:	FS TT-E-2784, [Note **][(semigloss)]	1.5 mils DFT
Topcoat:	FS TT-E-2784, [Note **][(semigloss)]	1.5 mils DFT

[NOTE **: Eggshell shall conform to a gloss at 60 degrees between 10 and 25 units in accordance with ASTM D 523.]

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 50	1.5 mils DFT
Intermediate:	MPI 52 (eggshell)	1.5 mils DFT
Topcoat:	MPI 52 (eggshell)	1.5 mils DFT]

[Primer:	MPI 50	1.5 mils DFT
Intermediate:	MPI 54 (semigloss)	1.5 mils DFT
Topcoat:	MPI 54 (semigloss)	1.5 mils DFT]]

3. [Primer:	CID A-A-2994, Type II	2.0 mils DFT
Intermediate:	CID A-A-2246, [flat][eggshell][semigloss]	1.5 mils DFT
Topcoat:	CID A-A-2246, [flat][eggshell][semigloss]	1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 50	2.0 mils DFT
Intermediate:	MPI 138 (flat)	1.5 mils DFT
Topcoat:	MPI 138 (flat)	1.5 mils DFT]

[Primer:	MPI 50	2.0 mils DFT
Intermediate:	MPI 139 (eggshell)	1.5 mils DFT
Topcoat:	MPI 139 (eggshell)	1.5 mils DFT]

TABLE 5

INTERIOR CONCRETE, CONCRETE MASONRY, [PLASTER][AND][WALLBOARD] SURFACES

[Primer:	MPI 50	2.0 mils DFT
Intermediate:	MPI 141 (semigloss)	1.5 mils DFT
Topcoat:	MPI 141 (semigloss)	1.5 mils DFT]]

B. Concrete ceilings, uncoated:

1. [Primer: As recommended by manufacturer of FS TT-C-555
   Intermediate: FS TT-C-555 Type I (see note)
   Topcoat: FS TT-C-555 Type I (see note)

   NOTE: Sufficient coats to provide no less than 20 mils of finished coating system. Texture: [sand] [coarse]]

2. [[Primer: As recommended by manufacturer of MPI 41
   Intermediate: MPI 41 coarse texture (see note)
   Topcoat: MPI 41 coarse texture (see note)]

   [Primer: As recommended by manufacturer of MPI 42
   Intermediate: MPI 42 medium texture (see note)
   Topcoat: MPI 42 medium texture (see note)]

NOTE: Sufficient coats to provide no less than 16 to 18 mils of coating.]

C. Concrete, except floors, in toilets [and other high humidity areas:]

1. [Primer: CID A-A-2994, Type II 1.5 mils DFT
   Intermediate: CID A-A-50574 (semigloss) 1.5 mils DFT
   Topcoat: CID A-A-50574 (semigloss) 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

   Primer: MPI 50 1.5 mils DFT
   Intermediate: MPI 47 (semigloss) 1.5 mils DFT
   Topcoat: MPI 47 (semigloss) 1.5 mils DFT]

2. [Primer: MIL-DTL-24441 /29 Formula 150 Type IV 3.0 mils DFT
   Intermediate: N/A
   Topcoat: MIL-DTL-24441*/27 Formula 157 Type IV 3.0 mils DFT

NOTE * or: Type IV topcoat formulas in other colors may be selected]

3. [Primer: CID A-A-2994, Type II 2.0 mils DFT
   Intermediate: CID A-A-2246, [flat][eggshell][semigloss] 1.5 mils DFT
   Topcoat: CID A-A-2246, [flat][eggshell][semigloss] 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

   [Primer: MPI 50 2.0 mils DFT
   Intermediate: MPI 138 (flat) 1.5 mils DFT
   Topcoat: MPI 138 (flat) 1.5 mils DFT]

TABLE 5

INTERIOR CONCRETE, CONCRETE MASONRY, [PLASTER][AND][WALLBOARD] SURFACES

[Primer:	MPI 50	2.0 mils DFT
Intermediate:	MPI 139 (eggshell)	1.5 mils DFT
Topcoat:	MPI 139 (eggshell)	1.5 mils DFT]
[Primer:	MPI 50	2.0 mils DFT
Intermediate:	MPI 141 (semigloss)	1.5 mils DFT
Topcoat:	MPI 141 (semigloss)	1.5 mils DFT]]

4. [Primer: CID A-A-3120 Type C 1.5 mils DFT
   Intermediate: N/A
   Topcoat: CID A-A-3120 Type C 1.5 mils DFT]

D. Concrete masonry:

1. [Filler: CID A-A-1500 (Fill all holes in masonry surfaces)
   Primer: CID A-A-2994, Type II 2.0 mils DFT
   Intermediate: CID A-A-2246, [flat][eggshell][semigloss] 1.5 mils DFT
   Topcoat: CID A-A-2246, [flat][eggshell][semigloss] 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

[Filler:	MPI 4 (Fill all holes in masonry surface)	
Primer:	MPI 50	2.0 mils DFT
Intermediate:	MPI 138 (flat)	1.5 mils DFT
Topcoat:	MPI 138 (flat)	1.5 mils DFT]
[Filler:	MPI 4 (fill all holes in masonry surface)	
Primer:	MPI 50	2.0 mils DFT
Intermediate:	MPI 139 (eggshell)	1.5 mils DFT
Topcoat:	MPI 139 (eggshell)	1.5 mils DFT]
[Filler:	MPI 4 (fill all holes in masonry surface)	
Primer:	MPI 50	2.0 mils DFT
Intermediate:	MPI 141 (semigloss)	1.5 mils DFT
Topcoat:	MPI 141 (semigloss)	1.5 mils DFT]]

E. Concrete masonry in toilets [and high humidity areas]:

1. [Filler: CID A-A-1500 (fill all holes in masonry surface)
   Primer: CID A-A-2994, Type II 1.5 mils DFT
   Intermediate: CID A-A-2246, [flat][eggshell][semigloss] 1.5 mils DFT
   Topcoat: CID A-A-2246, [flat][eggshell][semigloss] 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

[Filler:	MPI 4 (Fill all holes in masonry surface)	
Primer:	MPI 50	2.0 mils DFT
Intermediate:	MPI 138, (flat)	1.5 mils DFT
Topcoat:	MPI 138, (flat)	1.5 mils DFT]
[Filler:	MPI 4 (Fill all holes in masonry surface)	

TABLE 5

INTERIOR CONCRETE, CONCRETE MASONRY, [PLASTER][AND][WALLBOARD] SURFACES

Primer:	MPI 50	2.0 mils DFT
Intermediate:	MPI 139, (eggshell)	1.5 mils DFT
Topcoat:	MPI 139, (eggshell)	1.5 mils DFT]

[Filler: MPI 4 (Fill all holes in masonry surfaces)

Primer:	MPI 50	2.0 mils DFT
Intermediate:	MPI 141, (semigloss)	1.5 mils DFT
Topcoat:	MPI 141, (semigloss)	1.5 mils DFT]]

2. [Filler: CID A-A-1500 (fill all holes in masonry surface)

Primer:	CID A-A-2994, Type II	1.5 mils DFT
Intermediate:	CID A-A-2962, [flat][NOTE **][semigloss]	1.5 mils DFT
Topcoat:	CID A-A-2962, [flat][NOTE **][semigloss]	1.5 mils DFT

[NOTE **: Eggshell shall conform to a gloss at 60 degrees between 10 and 25 units in accordance with ASTM D 523.]]

EQUIVALENT CROSS-OVER MATCH

[Filler: MPI 4 (Fill all holes in masonry surface)

Primer:	MPI 50	2.0 mils DFT
Intermediate:	MPI 49, (flat)	1.5 mils DFT
Topcoat:	MPI 49, (flat)	1.5 mils DFT]

[Filler: MPI 4 (Fill all holes in masonry surface)

Primer:	MPI 50	2.0 mils DFT
Intermediate:	MPI 51, (eggshell)	1.5 mils DFT
Topcoat:	MPI 51, (eggshell)	1.5 mils DFT]

[Filler: MPI 4 (Fill all holes in masonry surfaces)

Primer:	MPI 50	2.0 mils DFT
Intermediate:	MPI 47, (semigloss)	1.5 mils DFT
Topcoat:	MPI 47, (semigloss)	1.5 mils DFT]]

3. [Primer: MIL-DTL-24441 /29 Formula 150 Type IV 3.0 mils DFT
Intermediate: N/A
Topcoat: MIL-DTL-24441* /31 Formula 152 Type IV 3.0 mils DFT

NOTE * or: Type IV topcoat formulas in other colors may be selected]

F. [Plaster] [and] [Wallboard] not otherwise specified:

1. [Primer: CID A-A-2994, Type II 1.5 mils DFT
Intermediate: FS TT-P-29 (flat) 1.5 mils DFT
Topcoat: FS TT-P-29 (flat) 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	MPI 50	1.5 mils DFT
Intermediate:	MPI 53 (flat)	1.5 mils DFT
Topcoat:	MPI 53 (flat)	1.5 mils DFT]

TABLE 5

INTERIOR CONCRETE, CONCRETE MASONRY, [PLASTER][AND][WALLBOARD] SURFACES

2. [Primer: CID A-A-2994, Type II 1.5 mils DFT
Intermediate: FS TT-E-2784, [(Note **)][(semigloss)] 1.5 mils DFT
Topcoat: FS TT-E-2784, [(Note **)][(semigloss)] 1.5 mils DFT

[NOTE **: Eggshell shall conform to a gloss at 60 degrees between 10 and 25 units in accordance with ASTM D 523.]

EQUIVALENT CROSS-OVER MATCH

[Primer: MPI 50 1.5 mils DFT
Intermediate: MPI 52 (eggshell) 1.5 mils DFT
Topcoat: MPI 52 (eggshell) 1.5 mils DFT]

[Primer: MPI 50 1.5 mils DFT
Intermediate: MPI 54 (semigloss) 1.5 mils DFT
Topcoat: MPI 54 (semigloss) 1.5 mils DFT]]

3. [Primer: CID A-A-2994, Type II 2.0 mils DFT
Intermediate: CID A-A-2246, [flat][eggshell][semigloss] 1.5 mils DFT
Topcoat: CID A-A-2246, [flat][eggshell][semigloss] 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

[Primer: MPI 50 2.0 mils DFT
Intermediate: MPI 138 (flat) 1.5 mils DFT
Topcoat: MPI 138 (flat) 1.5 mils DFT]

[Primer: MPI 50 2.0 mils DFT
Intermediate: MPI 139 (eggshell) 1.5 mils DFT
Topcoat: MPI 139 (eggshell) 1.5 mils DFT]

[Primer: MPI 50 2.0 mils DFT
Intermediate: MPI 141 (semigloss) 1.5 mils DFT
Topcoat: MPI 141 (semigloss) 1.5 mils DFT]]

G. [Plaster] [and] [Wallboard] in toilets [and other high humidity areas]:

1. [Primer: CID A-A-2994, Type II 2.0 mils DFT
Intermediate: CID A-A-2246, [flat][eggshell][semigloss] 1.5 mils DFT
Topcoat: CID A-A-2246, [flat][eggshell][semigloss] 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

[Primer: MPI 50 2.0 mils DFT
Intermediate: MPI 138 (flat) 1.5 mils DFT
Topcoat: MPI 138 (flat) 1.5 mils DFT]

[Primer: MPI 50 2.0 mils DFT

TABLE 5

INTERIOR CONCRETE, CONCRETE MASONRY, [PLASTER][AND][WALLBOARD] SURFACES

Intermediate:	MPI 139 (eggshell)	1.5 mils DFT
Topcoat:	MPI 139 (eggshell)	1.5 mils DFT]
[Primer:	MPI 50	2.0 mils DFT
Intermediate:	MPI 141 (semigloss)	1.5 mils DFT
Topcoat:	MPI 141 (semigloss)	1.5 mils DFT]]

2. [Primer
   - (non-shop-primed surfaces): CID A-A-2994 Type II 2.0 mils DFT
   Intermediate: CID A-A-2962 [flat][Note **][semigloss] 1.5 mils DFT
   Topcoat: CID A-A-2962 [flat][Note **][semigloss] 1.5 mils DFT

   [NOTE **: Eggshell shall conform to a gloss at 60 degrees between 10 and 25 units in accordance with ASTM D 523.]

EQUIVALENT CROSS-OVER MATCH

[[Primer - (non-shop-primed surfaces):	MPI 45	2.0 mils DFT
Intermediate:	MPI 49 (flat)	1.5 mils DFT
Topcoat:	MPI 49 (flat)	1.5 mils DFT]
[Primer - (non-shop-primed surfaces):	MPI 45	2.0 mils DFT
Intermediate:	MPI 51 (eggshell)	1.5 mils DFT
Topcoat:	MPI 51 (eggshell)	1.5 mils DFT]
[Primer - (non-shop-primed surfaces):	MPI 45	2.0 mils DFT
Intermediate:	MPI 47 (semigloss)	1.5 mils DFT
Topcoat:	MPI 47 (semigloss)	1.5 mils DFT]]

TABLE 6
EXTERIOR WOOD [AND PLYWOOD] SURFACES

A. Wood and plywood, trim, including top, bottom and edges of doors:

1. [Primer: CID A-A-2336 2.0 mils DFT
   Intermediate: CID A-A-3067 [semigloss][gloss] 1.5 mils DFT
   Topcoat: CID A-A-3067 [semigloss][gloss] 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

[[Primer:	MPI 7	2.0 mils DFT
Intermediate:	MPI 94 (semigloss)	1.5 mils DFT
Topcoat:	MPI 94 (semigloss)	1.5 mils DFT]

TABLE 6

EXTERIOR WOOD [AND PLYWOOD] SURFACES

[Primer:	MPI 7	2.0 mils DFT
Intermediate:	MPI 9 (gloss)	1.5 mils DFT
Topcoat:	MPI 9 (gloss)	1.5 mils DFT]]
2. [Primer:	CID A-A-2336	1.5 mils DFT
Intermediate:	FS TT-E-2784, [(semigloss)][(gloss)]	1.5 mils DFT
Topcoat:	FS TT-E-2784, [(semigloss)][(gloss)]	1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 7	1.5 mils DFT
Intermediate:	MPI 11 (semigloss)	1.5 mils DFT
Topcoat:	MPI 11 (semigloss)	1.5 mils DFT]
[Primer:	MPI 7	1.5 mils DFT
Intermediate:	MPI 119 (gloss)	1.5 mils DFT
Topcoat:	MPI 119 (gloss)	1.5 mils DFT]]

[B. Existing wood previously coated with Alkyd finish coat:

1. [Primer:	MPI 17	0.0375 mm DFT
Intermediate:	MPI 11 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 11 (semigloss)	0.0375 mm DFT]
[Primer:	MPI 17	0.0375 mm DFT
Intermediate:	MPI 119 (gloss)	0.0375 mm DFT
Topcoat:	MPI 119 (gloss)	0.0375 mm DFT]]

[C. Existing wood previously coated with latex finish coat:

1. [Primer:	N/A	
Intermediate:	MPI 11 (semigloss)	0.0375 mm DFT
Topcoat:	MPI 11 (semigloss)	0.0375 mm DFT]
[Primer:	N/A	
Intermediate:	MPI 119 (gloss)	0.0375 mm DFT
Topcoat:	MPI 119 (gloss)	0.0375 mm DFT]]

[D. Uncoated and previously stained wood siding:

1. Primer:	N/A	
Intermediate:	N/A	
Topcoat:	FS TT-S-708	1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	N/A	
Intermediate:	N/A	
Topcoat:	[MPI 13 (semi-transparent)	1.5 mils DFT]
	[MPI 14 (solid color)	1.5 mils DFT]]

****

NOTE: (Table 7). Use latex gloss or semigloss paint in occupied buildings and where strong odors would be objectional. Where allowable, consider use of eggshell or semigloss enamel in lieu of flat paint in areas subject to soiling, where gloss is not desired.

(Items A and F). For existing surfaces with alkyd enamel coating, do not specify latex paint which does not bond well to enamel. Avoid applying latex paint over alkyd primers.

(Items B thru E). Indicate locations where natural finish is required. Omit stain if a stained finish is not required.

(Item E). If pigmented floor coating is required, use 3 coats of low VOC compliant FS TT-E-2784 in lieu of FS TT-E-487.

(Item F). List other high humidity areas requiring enamel finishes. For tile-like finishes, filler materials, and applications refer to Section 09963, "High-Build Glaze Coatings." These high performance coatings are used for exposure-resistant requirements and can be applied to wood, metal, and concrete substrates.

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TABLE 7

INTERIOR WOOD AND PLYWOOD SURFACES

A. Wood and plywood not otherwise specified:

[Primer: CID A-A-2994 Type I on softwood plywood 1.5 mils DFT]
Intermediate: CID A-A-2962, [NOTE **][semigloss][gloss] 1.5 mils DFT
Topcoat: CID A-A-2962, [NOTE **][semigloss][gloss] 1.5 mils DFT

[NOTE **: Eggshell shall conform to a gloss at 60 degrees between 10 and 25 units in accordance with ASTM D 523.]

EQUIVALENT CROSS-OVER MATCH

[Primer: MPI 45 1.5 mils DFT
Intermediate: MPI 51 (eggshell) 1.5 mils DFT
Topcoat: MPI 51 (eggshell) 1.5 mils DFT]

[Primer: MPI 45 1.5 mils DFT
Intermediate: MPI 47 (semigloss) 1.5 mils DFT
Topcoat: MPI 47 (semigloss) 1.5 mils DFT]

[Primer: MPI 45 1.5 mils DFT

TABLE 7

INTERIOR WOOD AND PLYWOOD SURFACES

Intermediate:	MPI 48 (gloss)	1.5 mils DFT
Topcoat:	MPI 48 (gloss)	1.5 mils DFT]]

B. Wood [except floors], natural finish:

1. [Primer: N/A

Intermediate:	FS TT-S-711	1.5 mils DFT
Topcoat:	CID A-A-1800 (3 coats)	1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	N/A	
Intermediate:	MPI 90	1.5 mils DFT
Topcoat:	MPI 28 (3 coats)	1.5 mils DFT]

C. Plywood, natural finish:

1. Primer: N/A

Intermediate:	MPI 90	1.5 mils DFT
Topcoat:	MPI 57 (3 coats)	1.5 mils DFT

D. Wood floors, natural finish:

1. [Primer: N/A

Intermediate:	FS TT-S-711	1.5 mils DFT
Topcoat:	FS TT-C-542 (3 coats)	1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	N/A	
Intermediate:	MPI 90 (one coat)	1.5 mils DFT
Topcoat:	MPI 31 (three coats)	1.5 mils DFT]

2. [Primer: FS TT-C-542 Type I 1.5 mils DFT

Intermediate:	FS TT-C-542 Type I	1.5 mils DFT
Topcoat:	FS TT-C-542 Type I	1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

Primer:	MPI 31 (one coat)	1.5 mils DFT
Intermediate:	MPI 31 (one coat)	1.5 mils DFT
Topcoat:	MPI 31 (one coat)	1.5 mils DFT]

E. Wood surfaces in toilets [and other high humidity areas]:

1. [As specified in Section 09963, "High-Build Glaze Coatings."]

2. [Primer: CID A-A-2994 Type I 1.5 mils DFT

Intermediate:	CID A-A-2962, [(semigloss)][(gloss)]	1.5 mils DFT
Topcoat:	CID A-A-2962, [(semigloss)][(gloss)]	1.5 mils DFT

TABLE 7

INTERIOR WOOD AND PLYWOOD SURFACES
EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 45	1.5 mils DFT
Intermediate:	MPI 47 (semigloss)	1.5 mils DFT
Topcoat:	MPI 47 (semigloss)	1.5 mils DFT]
[Primer:	MPI 45	1.5 mils DFT
Intermediate:	MPI 48 (gloss)	1.5 mils DFT
Topcoat:	MPI 48 (gloss)	1.5 mils DFT]

3. [Primer: CID A-A-2994 Type II 1.5 mils DFT
   Intermediate: CID A-A-2246 [(semigloss)][(gloss)] 1.5 mils DFT
   Topcoat: CID A-A-2246 [(semigloss)][(gloss)] 1.5 mils DFT

EQUIVALENT CROSS-OVER MATCH

[Primer:	MPI 50	1.5 mils DFT
Intermediate:	MPI 141 (semigloss)	1.5 mils DFT
Topcoat:	MPI 141 (semigloss)	1.5 mils DFT]
[Primer:	MPI 50	1.5 mils DFT
Intermediate:	MPI 114 (gloss)	1.5 mils DFT
Topcoat:	MPI 114 (gloss)	1.5 mils DFT]]

F. Natural finish wood doors:

1. [Primer: FS TT-S-711 (one coat)
   Intermediate: CID A-A-2335 sealer (one coat) and sand with 220 grit
   Topcoat: FS TT-C-542 (two coats)

EQUIVALENT CROSS-OVER MATCH

Primer: MPI 90 (one coat)
Intermediate: MPI 91 (one coat) and sand with 220 grit
Topcoat: MPI 31 (two coats)]

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NOTE: Suggestions for improvement of this specification will be welcomed using the Navy "Change Request Forms" subdirectory located in SPECSINTACT in Jobs or Masters under "Forms/Documents" directory or DD Form 1426. Suggestions should be forwarded to:

Commander
Naval Facilities Engineering Command
Engineering Innovation and Criteria Office, Code EICO
1510 Gilbert Street
Norfolk, VA 23511-2699

FAX: (757) 322-4416 or
Email: cgs@efdlant.navfac.navy.mil

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-- End of Section --